Attachment I

Transcript, PRE-BID CONFERENCE 4 - 15 - 03
Northwest Pipe and Casing/Hall Process Site Remedial Action
Reported by: Paula D. Tieger - - RPR, CSR

PR-R7-03-10050

NORTHWEST PIPE AND CASING/HALL PROCESS COMPANY REMEDIAL ACTION

PRE-BID CONFERENCE

April 15, 2003

Reported by: Paula D. Tieger -- RPR, CSR

ORIGINAL

Τ		APPEARANCES:
2		
3	Paul Anthamatten	
4	Larry Kalwei	
5	Alan Goodman	
6	Gary J. Newbore	
7	David Weatherby	
8	Erik Bakkom	
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1	MR. ANTHAMATTEN: Let's go ahead and get	
2	started. First of all, I'd like to welcome you.	
3	We appreciate on behalf of the Environmental	
4	Protection Agency we appreciate your interest. The	
5	purpose today is to go over our solicitation for	
6	Remedial Action, Northwest Pipe and Casing/Hall	
7	Process Company. That's about a mile from here,	
8	and you'll have an opportunity later on this	
9	morning to tour that site, and we'd invite and	
10	encourage every one of you to attend that.	
11	I want to give you a little bit of an	
12	idea of the agenda. My name is Paul Anthamatten,	
13	and I'm with Region 7, Environmental Protection	
14	Agency. I'm one of the contracting officers that's	
15	assigned to this section. We will have a	
16	stenographer here today. Her purpose is to produce	
17	a transcript of these proceedings. It's our	
18	intentions to take that transcript and modify the	
19	solicitation. So if you're not avid notetakers, as	
20	I'm not, it will be taken care of. We'll also	
21	record questions and answers as they're asked.	
22	Along those lines, I would ask that	
23	although I'm kind of an informal person, I'd ask	
24	that we follow some protocol in consideration of	
25	our stenographer. What I'm going to ask you to do	

- is let the speaker speak, and we will ask you,
- 2 whoever it is at the time -- we will accept
- 3 questions after they've finished their brief
- 4 presentations. I'm going to ask you to raise your
- 5 hands, if you don't mind. That will give us a
- 6 chance to recognize one question at a time. Also,
- 7 we're going to ask for one question, and we'll give
- 8 you one answer for one question. Please don't
- 9 produce a run-on sentence because I'm from the
- 10 Midwest, and I don't speak as fast as a lot of you
- 11 guys, and I'll probably forget what you ask. So
- 12 when you ask a question, just try to keep it one
- 13 question per asking.
- We provided some note cards at the end
- of the table. As you think about it, if you think
- 16 about it, we would encourage you to write your
- 17 question down and just pass it forward. We'll
- 18 attempt to answer the written questions first as we
- 19 move into it. That doesn't mean, though, that you
- 20 can't ask questions on the fly. Please do, as the
- 21 question arises. Any questions so far on that
- 22 process?
- 23 (No response)
- MR. ANTHAMATTEN: As an administrative
- issue, please be sure that you have signed in.

- 1 That's for our purposes. And if you don't mind, I
- 2 would like you to include your e-mail address on
- 3 the sign-in sheet if you haven't done that.
- 4 Overview of today's events: This
- 5 morning we're going to have a conference. I'll
- 6 give basically the introduction. I'm going to
- 7 introduce our team in a minute. Actually, I'll let
- 8 them introduce themselves. I'm going to give you a
- 9 very brief overview of the contract requirements.
- 10 Mr. Goodman will then give you a brief description
- of the design and the specifications. At the end
- of each of those presentations we will accept
- 13 questions. And then after the -- after we're
- 14 through, we will also accept questions. It's our
- 15 intention to run until about noon today. We'll try
- 16 to give you a break about 10:30 depending on the
- 17 momentum.
- With that in mind, I'm going to let the
- 19 government personnel and URS introduce themselves.
- 20 To my left is Mr. Larry Kalwei. He's my boss. So,
- 21 Larry?
- MR. KALWEI: My name is Larry Kalwei.
- 23 I'm in charge of the contracts office in Kansas
- 24 City. And for those that don't know it already and
- 25 are wondering why Kansas City is up here in

- 1 Portland, Oregon, trying to do a contract for
- 2 Region 10 is that we've taken over their contracts
- 3 about two years ago. So we do all of Region 10's
- 4 EPA Seattle office's contracts out of Kansas City.
- 5 So that's why.
- 6 MR. GOODMAN: I'm Al Goodman with EPA.
- 7 I'm with the Oregon operations office, which is in
- 8 Portland here. And I'm the EPA site project
- 9 manager for the Northwest Pipe and Casing site, and
- 10 I've been with -- on this site eight years,
- 11 10 years, maybe more than that. It's been a while.
- 12 So I'm fairly familiar with the site. Later today,
- or sometime this morning, there's also going to be
- 14 a representative from Oregon DEQ here, Debbie
- 15 Bailey, with Oregon DEQ in their Northwest regional
- 16 office.
- MR. NEWBORE: I'm Gary Newbore. I'm
- 18 with URS. Also with me is David Weatherby here on
- 19 the left, and Erik Bakkom. We were the engineers
- on the project and may do the construction
- 21 oversight, and so we'll be working with Al on that.
- MR. ANTHAMATTEN: Go ahead, gentlemen,
- 23 introduce yourselves.
- MR. BAKKOM: Gary took care of it.
- MR. ANTHAMATTEN: Thank you. Our

- 1 stenographer is Paula. I mentioned, as a result of
- 2 this conference we're going to amend our
- 3 solicitation to include the transcript of these
- 4 proceedings. We may or may not -- depending on the
- 5 nature and the extent of your questions, we may or
- 6 may not extend the term to develop your offer -- or
- 7 your proposal. I'm making certain assumptions, and
- 8 we made certain assumptions with this, so we're
- 9 going to try to pace these -- this presentation
- 10 based on that.
- We're going to assume that you've
- 12 reviewed and are kind of familiar with the terms
- 13 and conditions of the solicitation. We're also
- 14 going to -- I guess I've also assumed that you're
- 15 experienced in installing ground water circulation
- 16 wells or treatment systems. But those are not
- 17 absolute assumptions. Please feel free to ask
- 18 questions. The purpose and our primary objective
- 19 here is to insure that each of you have a clear
- 20 understanding of the EPA's objectives and the
- 21 requirements that we put out in the specifications
- or the drawings. I appreciate that. I guess, are
- 23 there any questions to this point?
- 24 (No response)
- MR. ANTHAMATTEN: If not, I'd like to

- 1 talk just for a minute briefly about the
- 2 solicitation. The solicitation is posted on the
- 3 Web. I'm not going to go into the details on the
- 4 solicitation or to the specifics of it unless you
- 5 ask. It's a standard U.S. government solicitation.
- 6 It follows the uniform contract format. You should
- 7 be familiar with the format. I'd particularly draw
- 8 your attention to the attachments to the
- 9 solicitation.
- 10 On the last page are a bidder's
- 11 checklist. I threw that together really quickly
- 12 for the last attachment or bid instructions. Those
- are not intended to be all inclusive, but I wanted
- 14 to make sure that you at least have a good feel for
- some of the specific requirements of this
- 16 procurement. I'm not going to read through that.
- 17 This is a bonded procurement. We'll ask for bid
- 18 bonds as part of the solicitation. Note the
- 19 location where the bid package is supposed to be
- 20 presented. It's 12:00 o'clock on the 7th of May,
- 21 at this point. It has to be filed with Kim Bremer
- in Region 10; she's located on 1200 Sixth Avenue.
- 23 And the bids are to be filed by 12:00 noon.
- I guess instead of wading through this
- 25 thing and probably being redundant with irrelevant

- 1 issues, I'd like to open the floor. Does anyone
- 2 have any questions at this point about the
- 3 solicitation? Keep in mind, please, that we're
- 4 going to address the technical pieces in a minute.
- 5 Yes, sir?
- 6 SPEAKER: Are drawings available
- 7 anywhere besides the Web page?
- MR. ANTHAMATTEN: The drawings are
- 9 available under the EPA website. The drawings and
- 10 specifications are attached to, are an integral
- 11 part of, the solicitation and are available at the
- 12 Web site. If you have access to the Internet and
- an Adobe Acrobat reader, you should be able to
- 14 publish, print as many copies of those as you'd
- 15 like.
- 16 SPEAKER: The solicitation that I picked
- out was absent of any experience or qualifications
- 18 for contractor and operator. I'm not -- I haven't
- 19 gone through all the attachments and various
- 20 miscellaneous documents. Is there a requirement or
- 21 will there be anything that requests specific
- 22 experience with monitoring wells or this type of
- 23 remedial activity?
- MR. ANTHAMATTEN: The answer is yes. We
- 25 expect that experienced bidders -- that bidders in

- 1 the ground water circulation well and water
- 2 treatment area will be qualified and experienced.
- 3 And rather than burden each individual prospective
- 4 offerer with the requirement to produce that, we've
- 5 got a poster board requirement that is attached as
- 6 well. So the successful bidder, the person to whom
- 7 this is awarded, will have to produce references
- 8 and other materials that are listed as, I believe,
- 9 attachment A to the solicitation.
- MR. KALWEI: Basically, it's the
- 11 responsibility of the firm to -- only going to be
- 12 required of the low bidder, the apparent low
- 13 bidder. And then that responsibility determination
- 14 will be made. If the firm is determined
- 15 non-responsible, then it goes to the next lowest
- 16 bidder.
- 17 SPEAKER: And the qualifications are
- 18 listed in this attachment you mentioned?
- MR. KALWEI: Yes.
- MR. ANTHAMATTEN: Yes. Specifically,
- 21 that's attachment B, requirements for the apparent
- low bidder. After we've received that, we'll make
- 23 an announcement of the apparent low bidder. The
- 24 apparent low bidder will have to produce this
- 25 material within a specified period of time. After

- 1 that's been satisfactorily reviewed, I will issue a
- 2 notice to proceed and a contract agreement.
- 3 SPEAKER: I notice this intent to have a
- 4 10 percent advantage to small businesses.
- 5 MR. ANTHAMATTEN: Right. What was the
- 6 question, sir? I'm sorry.
- 7 SPEAKER: This is not a small business
- 8 set-aside, correct?
- 9 MR. ANTHAMATTEN: It is not a small
- 10 business set-aside.
- 11 SPEAKER: But a 10 percent advantage
- 12 does go to small business?
- MR. ANTHAMATTEN: I think there's a
- 14 10 percent -- I need to look at that and I'll
- 15 answer that question in a minute. I'm not sure
- 16 whether it's small disadvantaged, but there is
- 17 10 percent off.
- 18 SPEAKER: I can read the spec.
- MR. ANTHAMATTEN: It's in their
- 20 contract.
- 21 SPEAKER: "Evaluation adjustment:
- 22 Contracting officer will evaluate offers by adding
- 23 a factor of 10 percent to the price of all offers
- 24 except, one, offers from small disadvantaged
- 25 business concerns that have not made the

- 1 adjustment."
- 2 MR. ANTHAMATTEN: So the requirement
- 3 applies to small -- certified small disadvantaged
- 4 businesses.
- 5 MR. KALWEI: That's a price adjustment
- 6 given for small disadvantaged businesses.
- 7 Basically, if a small disadvantaged business
- 8 submits a bid on this and a large business submits
- 9 a bid for this, there's going to be a 10-percent
- 10 addition to the large business' bid. And then if
- 11 the small disadvantaged business is lower than
- 12 that, then it will go to the small disadvantaged
- 13 business.
- 14 SPEAKER: So it's a preference to a
- 15 small disadvantaged business?
- MR. KALWEI: Yes. Thank you.
- 17 SPEAKER: This sounded like a pretty
- 18 healthy bid bond requirement, as I recall; like 35
- 19 percent.
- 20 SPEAKER: 35 percent or 1.3 million
- 21 dollars, whichever is less.
- 22 SPEAKER: So I take it the engineer's
- estimate is roughly 4.2 million?
- MR. ANTHAMATTEN: I'm sorry?
- MR. KALWEI: Back to the bid bond. Bid

- 1 guarantees on page I-6 of 13, "The amount of bid
- 2 guarantee shall be 35 percent of the bid price, or
- 3 1.4 million dollars, whichever is less." That's
- 4 required at bid opening.
- 5 SPEAKER: Could you repeat where that is
- 6 in the specs, please?
- 7 MR. KALWEI: It's on page I-6 of 13.
- 8 It's under clause I-6, paragraph C.
- 9 SPEAKER: Thank you.
- MR. ANTHAMATTEN: Other questions,
- 11 comments?
- 12 (No response)
- MR. ANTHAMATTEN: One thing I want to
- 14 point out is a requirement to process soil
- 15 certifications. That's not -- that's specific to
- 16 this contract, so please pay attention to that. I
- 17 guess I can specifically point you to that. Give
- 18 me just a second. I quess L-11, "Business must
- 19 locate fill materials sufficient to accomplish the
- 20 work described and certify that the material meets
- 21 or exceeds the requirements of the specifications.
- "Note also that a written, notarized
- 23 certification is required from the landowner for
- 24 each proposed off-site borrow source."
- MR. KALWEI: Any other questions?

1	MR. ANTHAMATTEN: Any other questions?
2	(No response)
3	MR. ANTHAMATTEN: Okay. Having said
4	that, I'm going to let Mr. Goodman provide an
5	overview of the design, the drawings and the
6	specifications. Alan?
7	MR. GOODMAN: Thank you, and good
8	morning. It's good to see you all here. I did a
9	very brief overview of the project. Essentially,
10	there's three components to the project; two
11	construction pieces, and an operation and
12	maintenance part. The two construction pieces
13	consist of the soil cap over what we call
14	parcel B of the site. It's approximately I
15	think it's a 29-acre parcel of property that
16	apparently is totally vacant, to put the soil cap.
17	There's a component of that that includes
18	constructing some gravel roadways on the site and
19	then a wetlands restoration.
20	The second component of the site is
21	consists of insulation of several ground water
22	circulation well systems on that part of the site
23	that we call parcel B, as well as an adjacent part
24	of the site that's owned by the Oregon Department
25	of Transportation, or ODOT ODOT had a warehouse

- 1 office facility, an operating facility, on their
- 2 property that will need to be maintained and worked
- 3 around during that time. The circulation well
- 4 system also includes a number of additional
- 5 monitoring wells on the site, ground water
- 6 monitoring wells.
- 7 And the third component of the project
- 8 consists of operation and maintenance of the ground
- 9 water circulation well system for a period of one
- 10 year after construction. And then there's
- 11 additional -- an option, I think, is in the
- 12 solicitation for an additional year of operation
- 13 and maintenance. So those are the components --
- 14 the three components of the project. The ODOT
- 15 parcel is owned by the Oregon Department of
- 16 Transportation. The parcel that the soil cap is
- 17 going to go on, and most of the ground water
- 18 circulation wells, is actually owned by the Oregon
- 19 DEQ, and they are holding the property in trust for
- 20 EPA. So access to that part of the site is not a
- 21 problem. It will need to be controlled, but there
- 22 will be easy access to that site.
- Currently, there's two gates to the site
- 24 for access; a north gate off of what's called
- 25 Longfield Road, and a south gate off of Southeast

- 1 Mather Road. For the purposes of the site visit
- 2 today, we're going to be going to the site via the
- 3 south gate because there's construction going on on
- 4 Longfield Road and it's currently closed. However,
- 5 I would point out that during the construction
- 6 work, as its going on, Longfield Road is going to
- 7 need to be the principal road for construction
- 8 traffic. The south road goes through a residential
- 9 area, and we are not able to bring heavy traffic,
- 10 heavy trucks through that area.
- I don't have anything else to add to the
- 12 description of the project right now, and we want
- 13 to go through the written questions. Paul, did you
- 14 say you had -- there were some written questions?
- MR. ANTHAMATTEN: Just those four.
- MR. GOODMAN: I haven't seen those. So
- 17 do you have them?
- MR. KALWEI: Come up.
- MR. ANTHAMATTEN: I have to find them.
- 20 So go ahead and take the questions from the floor.
- MR. GOODMAN: So do that first?
- MR. ANTHAMATTEN: Yeah.
- MR. GOODMAN: Let's go ahead and proceed
- 24 with questions one questions at a time, and try to
- 25 speak up for the court reporter.

- 1 MR. KALWEI: It's going to be a real
- 2 short meeting.
- MR. NEWBORE: Who doesn't understand the
- 4 bid documents?
- 5 SPEAKER: I got a question on the well
- 6 design. For the extraction wells that -- the
- 7 tenant extraction wells, it indicates on the
- 8 detailed plans a 16-inch bore hole. According to
- 9 my resources, the Department requires only two
- inches on either side, so a 14-inch bore hole would
- 11 be acceptable in this state. Can we have that as
- 12 an alternative?
- MR. NEWBORE: Let's take that under
- 14 advisement.
- MR. KALWEI: We're going to take that
- 16 under advisement and get back with you after
- 17 discussing that issue.
- 18 SPEAKER: Okay.
- MR. ANTHAMATTEN: I'm sorry. I don't
- 20 have those questions with me. We'll publish them
- on the amendment to the solicitation. The one
- 22 question that I do recall, which we didn't respond
- 23 to, was a question about whether one could use an
- 24 air lift process in lieu of -- an air lift process
- 25 at this application. The answer was no. Anyone

- 1 that proposes that would be disqualified as
- 2 non-responsive because we have -- we require at
- 3 this application a reverse flow ground water
- 4 circulating system. That's the requirements of the
- 5 site. That's driven by the nature and extent of
- 6 the contamination at the site. That was the main
- 7 question that was asked that I do recall. Others
- 8 were technical questions about where the -- about
- 9 the location of the wells, I believe. And I
- 10 will -- I apologize. I left it in Seattle, I
- 11 guess.
- 12 SPEAKER: Is there a listing of the
- 13 constituents of the ground water within the bid
- 14 package?
- MR. GOODMAN: There is quite a bit of
- 16 information that is posted on the solicitation
- 17 website. There's two documents that would have
- 18 that information. There's a ground water
- 19 monitoring report dated 2002.
- MR. WEATHERBY: January 2003.
- MR. GOODMAN: The report is dated
- January 2003, but it's been monitored in 2002. And
- 23 that does have -- that does identify the chemical
- 24 contaminants of the ground water and the aerial
- 25 extent of all the monitoring done during that

- 1 period. There's also a ground water circulation
- 2 well pilot test technical memorandum that also
- 3 talks about the contamination and the remaining
- 4 constituents, but it's much more oriented towards
- 5 the pilot test of that technology that was done
- 6 last year.
- 7 SPEAKER: The specifications in the
- 8 actual treatment system construction,
- 9 specifications 11201, talk about, "The bid
- 10 submittal shall include all calculations by the
- 11 contractor, pump crews and equipment layout." Is
- 12 that -- that's not addressed in the actual
- 13 solicitation as a submittal with the bid. Was that
- intended to be with the bid or as a submittal as
- part of the actual pre-construction submittals?
- 16 MR. KALWEI: I don't have that
- 17 reference.
- 18 SPEAKER: It's 11201, Section 1.6A.
- MR. KALWEI: Let's take that under
- 20 advisement.
- 21 SPEAKER: I mean, it's kind of part of
- 22 the design/build nature of this contract; that the
- 23 contractor would have to know what he's going to
- 24 build in order to bid it. So do you want that with
- 25 the bid or not?

- 1 MR. KALWEI: We'll get back with you on
- 2 that one.
- 3 SPEAKER: Excuse me if I don't know
- 4 enough about it. Is there a design component to
- 5 this contract?
- 6 MR. GOODMAN: Is there a what?
- 7 SPEAKER: A design component to this
- 8 contract.
- 9 MR. GOODMAN: A design component?
- 10 SPEAKER: I just heard design/build from
- 11 the last question. I was wondering, if there's a
- 12 design component for this contract, I didn't know
- 13 what it was.
- MR. GOODMAN: No. This is the design
- 15 for both the soil cap and the ground water
- 16 circulation well system, right.
- 17 SPEAKER: Thanks.
- 18 SPEAKER: I mean, it's pretty clear in
- 19 the specifications that the contractor has to
- 20 select the treatment equipment itself, meaning you
- 21 have to design the actual treatment of the
- 22 equipment; you have to design the electrical that
- 23 goes with it, which is my next question about
- 24 alternates. And how do you -- how will a
- 25 contractor propose alternates that might comply

- 1 with the clean-up goal of the system versus the
- 2 concept of the equipment that's intended?
- MR. GOODMAN: Is your question about
- 4 alternates for equipment?
- 5 SPEAKER: Well, I quess it goes to
- 6 several things. For instance, like the vault sizes
- 7 and air stripper trays that might or might not fit
- 8 in a vault size; or the process equipment itself.
- 9 For instance, you're putting a heater, which is not
- 10 part of the design, but that might be something
- 11 that would help lower the overall O&M costs on the
- 12 system to include those kind of design elements in
- 13 the treatment system itself to help lower the O&M
- 14 costs. But it's not specified in the specs. How
- does a bidder include all of those in his lump sum
- 16 bid?
- MR. GOODMAN: So does your second
- 18 question, I just want to clarify, relate to
- 19 modifications that a contractor would propose to
- 20 the design of the system?
- 21 SPEAKER: Right. Section 11201, 1.7B,
- 22 alternates. It says that alternates will be --
- 23 shall be well-documented in the bid documents -- in
- 24 the contract bid documents.
- MR. GOODMAN: Okay. We're going to need

- 1 to confer on that and get back to you on that. But
- 2 I want to clarify, you had two questions, or was
- 3 that just one?
- 4 SPEAKER: I'll submit those in writing
- 5 anyway.
- 6 MR. GOODMAN: But were there two
- 7 questions, or was that the question?
- 8 SPEAKER: That was -- the second
- 9 question was about alternates and how to -- if we
- 10 feel that modifying the conceptual design either
- 11 for price or for O&M costs for long-term cost of
- 12 the project, how do you provide those with the bid.
- MR. KALWEI: For my clarification, the
- 14 bid, did it recommend what would be installed, and
- 15 then you're recommending an alternative to that, or
- 16 are you --
- 17 SPEAKER: For instance, there's the air
- 18 stripper; there's the blower; there's the carbon
- 19 and the zealite, but it doesn't specify what kind
- of blower or size of blower; it doesn't specify
- 21 some of the other instrumentations or controls. It
- 22 says, you know, you want a variable frequency dry
- 23 pump, but you don't want transducers to control
- 24 that. I mean, there's a lot of very technical
- 25 questions, which we can ask about those; I think

- 1 they have to be in writing.
- But as far as the contractor, you could
- 3 get a very, very generic treatment system or you
- 4 could get something that's well thought out but
- 5 it's going to cost more. And if we just answer the
- 6 mail on what's specified in the contract, it may
- 7 not be the fully functional system that you're
- 8 looking for.
- 9 MR. GOODMAN: Okay.
- 10 SPEAKER: I'm sorry, but in general it's
- 11 not the performance spec, correct? Is this project
- 12 designed without performance specs or not?
- MR. GOODMAN: I believe it is, isn't it,
- 14 Gary?
- MR. NEWBORE: It is.
- 16 SPEAKER: Pardon me?
- MR. GOODMAN: Yes. Other questions?
- 18 (No response)
- MR. KALWEI: If there's no more
- 20 questions, we're going to take about a 15-minute
- 21 break.
- 22 SPEAKER: I have a question regarding
- 23 the specified zealite for the vinyl chloride
- 24 removal. Does that manufacturer warrantee the
- 25 performance of the zealite? Because there is a

- 1 warranty as part of the contract where the system
- 2 will perform for both chemical removal and run
- 3 time. Is the zealite manufacturer, which you
- 4 specified today, are they signing up for that
- 5 warranty also?
- 6 MR. GOODMAN: We will confer and get
- 7 back to you on that. Just for clarification, do we
- 8 specify the manufacturer in the specifications,
- 9 Gary?
- MR. NEWBORE: No.
- MR. BAKKOM: For the zealite, yes.
- MR. GOODMAN: We did specify the
- 13 manufacturer?
- MR. BAKKOM: Yes.
- 15 SPEAKER: What's the procedure and
- 16 deadline for written questions?
- 17 MR. ANTHAMATTEN: I think you've got
- 18 about a week. I'll answer that with a specific
- 19 date. I'll have to search through the contract,
- 20 but we'll accept written questions up to about
- 21 next -- the 27th sticks in my mind, but I need to
- 22 verify that.
- SPEAKER: You'll put out with --
- MR. ANTHAMATTEN: No. It's in the
- 25 contract already. It says -- I'll try to find that

- 1 as we speak. Or I'm sorry. It's in the
- 2 invitation.
- MR. GOODMAN: I don't have anything else
- 4 to cover right now, Paul. We can take a short
- 5 break.
- 6 MR. ANTHAMATTEN: I appreciate that. If
- 7 you could give us, I'm not sure how much time, at
- 8 least 15 minutes, we'd appreciate that. If you
- 9 could excuse us then, and we'll just break. And
- 10 thanks a lot.
- 11 MR. GOODMAN: If anybody leaves, if
- 12 you're not planning on coming back after the break
- 13 but you are going to be coming for the site visit
- 14 at 1:00 o'clock, I've got maps up here with
- 15 directions. I've only got 20 copies, but
- 16 apparently it doesn't appear to be enough.
- MR. KALWEI: Everybody please sign in as
- 18 well on the back.
- 19 (A brief recess was held)
- MR. ANTHAMATTEN: We ran a little longer
- 21 than 15 minutes, but you asked some good questions.
- 22 Mr. Goodman is going to continue.
- MR. GOODMAN: We're back together here.
- 24 We've got some responses for you. Before I go
- 25 through those, I'd like to have Gary Newbore

- 1 mention a couple things relating to the project.
- 2 MR. NEWBORE: As most of you are pros at
- 3 this, you can see right away what the keys of the
- 4 job are. One is, we've got to find a pretty good
- 5 source of fill material, and I want to call your
- 6 attention in the specs that it's going to need to
- 7 be certified, non-haz material by the property
- 8 owner and by yourself. So that's a key. We will
- 9 check it.
- 10 Second item; your access for trucks onto
- 11 the site is going to be off 82nd down Longfield
- 12 from the north. And Clackamas County is repaving
- 13 that section during the summer. We have worked
- 14 with them so that hopefully there won't be any
- 15 problems with coordination between yourself and
- 16 Clackamas County. But you ought to plan on
- 17 touching base with them if you're the low bidder
- 18 and make sure that your truck schedule and their
- 19 work matches. I'd hate to see you get held up and
- 20 not be able to get into the site. There may be
- 21 times where that might happen. So please do
- 22 coordinate with them; make sure you know what
- 23 they're doing.
- Couple other items; one, the site is --
- you can only operate on the site from 7:00 a.m. to

- 1 7:00 p.m. Monday through Saturday. There is a
- 2 health and safety plan required on this. We want
- 3 an accident-free site. We will be very interested
- 4 in health and safety plans and will be watching
- 5 health and safety items pretty darn carefully out
- 6 there, so plan on that. You are responsible for
- 7 all your own permits. There is a wetlands on the
- 8 site that's going to need to be constructed. There
- 9 is some habitat piles that are going to be built
- 10 with slash and boulders and concrete slabs. Those
- 11 should already be on site, so it's a matter of
- 12 reconfiguring them in the locations that are
- 13 selected.
- 14 There may be excess woody debris. If
- so, you'll need to chip it up and windrow it so it
- 16 will be left on site and picked by the EPA. Okay.
- MR. GOODMAN: One thing on the road
- improvements, there's a railroad crossing there,
- 19 and there is frequent railroad traffic during the
- 20 day on that. I want people to be aware of that. I
- 21 don't believe there are long trains, but there's
- 22 frequent traffic there, and that could affect the
- 23 traffic on Longfield Road. Okay. I'm going to go
- 24 through the responses to the questions that were
- 25 raised. Additionally, during the break there was a

- 1 gentleman that had some additional questions. We'd
- 2 ask you to raise them again so we could take note
- of them for the record. So we'll do that after I
- 4 respond to these questions. Okay.
- 5 The first question was whether or not a
- 6 14-inch bore hole for the circulation wells would
- 7 be acceptable versus the 16-inch specified. And
- 8 the response is yes, a minimum of 14 inches will be
- 9 acceptable, and we'll amend the specifications to
- 10 provide for that, for the Oregon Water Resources
- 11 Department requirements. There was, let's see, two
- 12 related questions regarding the submittal of design
- 13 calculations. And in Section 11201 of the specs,
- 14 paragraph 1.6, submittal of the design
- 15 calculations, as it currently reads, it says, "All
- 16 bidders shall provide that information," and we
- 17 will be amending the specifications to provide to
- 18 say that only the apparent low bidder will be
- 19 required to provide that information under
- 20 paragraph 1.6 of 11201.
- 21 And related to that, same section,
- 22 11201, paragraph 1.7B, submittal of alternatives --
- 23 alternates for equipment, that will also be amended
- 24 to read that it would only be required of the
- 25 apparent low bidder, not all bidders. Related to

- 1 that, we're going to amend the solicitation to
- 2 require that the bids submitted be good for 60 days
- 3 as opposed to the 30 that's currently on page 1 of
- 4 the solicitation to provide for us to make sure we
- 5 have got additional time to evaluate that
- 6 information. Is that clear? No questions on that?
- 7 (No response)
- 8 MR. GOODMAN: Okay. Let's see. There
- 9 was a question about the zealite that is to be
- 10 provided. Okay. The question was -- I think the
- 11 question was, is the contractor going to be
- 12 required to meet the performance requirements for
- 13 the zealite. And the response is, the contractor
- is required under the current specs to warrantee
- 15 performance of the system. Do you have the section
- 16 that's covered in here to give to people?
- MR. BAKKOM: 1.3A, right.
- MR. NEWBORE: You're looking at the
- 19 performance specs?
- MR. GOODMAN: Yes, in the
- 21 specifications.
- MR. BAKKOM: I believe it's 1.3A.
- MR. GOODMAN: What section?
- MR. BAKKOM: 11201, 1.3B.
- MR. GOODMAN: We will be amending that

- 1 section to -- or I don't know if it's that section.
- MR. BAKKOM: It is that section.
- MR. GOODMAN: To specify what the
- 4 zealite -- purpose of the zealite is in the system.
- 5 MR. BAKKOM: That is another section,
- 6 actually. For the zealite?
- 7 MR. GOODMAN: Right.
- 8 MR. BAKKOM: That's Section 11201,
- 9 2.8A2. And that will be amended to include that
- 10 the zealite is specifically for the destruction and
- 11 removal of the vinyl chloride from the vapor
- 12 stream.
- MR. GOODMAN: Okay.
- MR. KALWEI: A point on that as well is
- 15 that there's a warranty clause, I-14, that kind of
- 16 references manufacturer warranties as such.
- 17 Well --
- MR. GOODMAN: Of the certification.
- MR. KALWEI: Of the solicitation
- 20 package.
- MR. GOODMAN: Okay. There was a
- 22 question regarding what is -- how would the liquid
- in the moisture knockout tank of the ground water
- 24 treatment system be removed. And the second part
- of that was, are we proposing that it be pumped

- 1 out. We will be amending the specifications for
- 2 that. What I can tell you right now is that we
- 3 will consider allowing the liquid in the knockout
- 4 tank to be returned to the air stripper for
- 5 treatment, and that will be provided in the
- 6 amendment.
- 7 Did that cover all the questions that we
- 8 had earlier?
- 9 MR. KALWEI: I think the only other
- 10 question was, when was the last date to submit
- 11 questions. And in the solicitation it says
- 12 October 20 -- I'm sorry, April 21st, close of
- 13 business. That is Central Standard Time, by the
- 14 way. There was a question whether or not the
- 15 sign-up sheet would be available to everybody, and
- 16 what we'll do is, we will make a list of that and
- 17 post that on our website as well. So yes. And
- 18 again, I would encourage everybody to please sign
- in. If you have your e-mail address, if you would
- 20 put that on there, we will e-mail you the amendment
- 21 directly so you will receive that without having to
- go to our website as well.
- MR. GOODMAN: Okay. Were there
- 24 additional questions?
- 25 SPEAKER: Can you tell us what you think

- 1 the review time is going to be on the design
- 2 submittals?
- MR. GOODMAN: I can't right now.
- 4 SPEAKER: The review time on the
- 5 designs; can you tell me what you think your review
- 6 time is going to be for the designs? I'm assuming
- 7 all that is in that four-month block of time that
- 8 you have to do the construction schedule. I have
- 9 the notice to proceed. I mean, we have up-front
- 10 submittals that are in there. You have no idea how
- 11 long it would take for that? That's a pretty short
- 12 block of time.
- MR. GOODMAN: For the selected
- 14 contractor, you're talking about?
- 15 SPEAKER: Yes. I'm assuming that all
- 16 has to happen within that four-month block of time
- 17 that you have for the project right now.
- MR. NEWBORE: Which design are you
- 19 talking about?
- 20 SPEAKER: All the design submittals for
- 21 all of the process and all the work plans that you
- 22 have in there.
- 23 MR. NEWBORE: After contract's been
- 24 awarded?
- 25 SPEAKER: After contract's awarded. You

- 1 have -- notice to proceed, you have May 22nd. And
- 2 then you have to have everything done by
- 3 September 30th. So if we have three weeks to get
- 4 the submittals in, there will be a lag time there
- 5 for the review before we can get started.
- 6 MR. GOODMAN: We have to look at the
- 7 specs to respond to that. Did you read through the
- 8 specs and not see it there?
- 9 SPEAKER: It's in the up-front -- it's
- 10 under this portion here. It's on page F-1 of 1
- 11 under deliverable performance, Section F. I'm just
- 12 referring to that as far as the dates are
- 13 concerned.
- MR. GOODMAN: For the overall dates, I
- 15 believe the specs actually have language regarding
- 16 review of actual submittals.
- 17 MR. NEWBORE: 1300.2.
- MR. GOODMAN: Do you want me to read
- 19 that, or is that -- is it a long section?
- MR. NEWBORE: Why don't you look at it?
- 21 MR. GOODMAN: 1300?
- MR. BAKKOM: 1300-2.
- MR. NEWBORE: Okay.
- MR. GOODMAN: Yeah. Under Section
- 25 01300, paragraph 1.4, submittal procedures.

1	SPEAKER: Five days.
2	MR. GOODMAN: Five days.
3	SPEAKER: That's what I see.
4	MR. GOODMAN: Right. F says, "For each
5	submittal for review allow five business days,
6	excluding delivery time to and from the contractor,
7	for engineer's and owner's review."
8	SPEAKER: Five days.
9	MR. GOODMAN: Yeah, five business days.
10	Okay. Were there the gentleman that we talked
11	to on the break, did you have questions you wanted
12	to raise?
13	SPEAKER: You've answered the question.
14	It was pertaining to what do we do with the
15	moisture that's in the knockout tank; how do we get
16	rid of it. Is there a pump supposed to be
17	installed there and return it back down to the
18	water treatment?
19	MR. GOODMAN: Yes.
20	MR. KALWEI: Okay. Are you okay on
21	that?
22	SPEAKER: Yes.
23	MR. KALWEI: Okay.
24	MR. GOODMAN: Other questions?
25	(No response)

- 1 SPEAKER: In the O&M costs --
- MR. GOODMAN: Oh. I just remembered.
- 3 We were going to -- you had a suggestion about
- 4 talking about the process for the systems. Do we
- 5 still want to have a brief discussion of that? We
- 6 didn't respond to that.
- 7 MR. NEWBORE: Wouldn't hurt.
- MR. KALWEI: That would be beneficial.
- 9 SPEAKER: My question on the O&M
- 10 costs --
- MR. NEWBORE: Can you hang on a second?
- 12 Why don't we go through --
- MR. WEATHERBY: Would everybody like me
- 14 to run through the treatment system and just give
- 15 you a general idea of how the thing's supposed to
- 16 function? Is it described well enough in the
- 17 specs, or would you like me to kind of --
- MR. KALWEI: I think I've seen enough
- 19 nods. Let's go through it real quick.
- MR. WEATHERBY: Drawing S-02 has a basic
- 21 sketch of what the system is supposed to do.
- 22 Essentially, what we're trying to do is remove VOCs
- 23 from ground water using air stripping. And we're
- 24 using the reverse flow ground water circulation
- 25 well system, which means each ground water

- 1 circulation well will be screened at two depths, an
- 2 upper and a lower screen. Water will be pumped
- 3 into the upper screen, stripped and then returned
- 4 to the lower screen for injection back into the
- 5 aquifer. That's what's called a reverse flow
- 6 system. There's also a normal flow system where
- 7 water will be plotted through the lower screen and
- 8 exits out the upper screen.
- 9 So because of our site conditions that
- 10 we have, in particular, the distribution of
- 11 contamination at the site and the shallow depth of
- 12 the ground water, we determined that a reverse flow
- 13 system is most suitable to the site. So that is
- 14 what we have designed for our speculative
- 15 contractor to build. And as you can see in the
- 16 specs, we recommend a packer between the two
- 17 screens to hydraulically isolate the two screens.
- We envision that a submersible pump will
- 19 be used to remove water from the well casing within
- 20 the upper screen section. That water will then go
- 21 to an air stripping unit which needs to be below
- 22 ground surface. And then from there the water will
- then get re-injected into the lower screen section
- 24 with a pump. The important factor that needs to be
- 25 considered is to have the pumping rates, that is,

- 1 the way that water's being removed from the upper
- 2 screen and the rate at which it's being
- 3 re-injected, those need to balance; those need to
- 4 be in equilibrium. So that's the way these wells
- 5 work.
- 6 So one of the requirements that we'll
- 7 have in the contract once this unit is installed is
- 8 for the contractor to demonstrate that they can
- 9 circulate ground water. The reason it's called
- 10 ground water circulation wells is that by removing
- 11 water from the upper screen and re-injecting it
- into the lower screen, you set up a circulation
- 13 cell in the aquifer around the well casing whereby
- water around the well in kind of a donut-shaped
- 15 area gets circulated through the well casing and
- 16 the air stripping unit multiple times to remove the
- 17 VOCs.
- 18 SPEAKER: Can you elaborate any more on
- 19 what would require a demonstration of the
- 20 circulation?
- MR. WEATHERBY: Yeah. We did a pilot
- 22 study last fall. There's already two wells
- 23 installed at this site. And we did a pilot test
- 24 last fall, a pumping test essentially, to determine
- 25 if we could indeed circulate ground water in

- 1 equilibrium. And we determined that we can. And
- 2 in fact, the hydrogeology at the site is very well
- 3 suited for these kind of wells.
- 4 So what we will be expecting the
- 5 contractor to do is essentially a simple pump test
- 6 whereby you pump from the upper screen and
- 7 re-inject the water. And what you need to
- 8 demonstrate is that your pressure that has
- 9 developed in the upper and lower screens, what you
- 10 get is a drop in pressure in the upper screen as
- 11 you pump; you get a draw-down, essentially. And in
- 12 the lower screen you're going to get an increase in
- 13 pressure. And what we'll want to see is a
- 14 draw-down curve that, you know, eventually flattens
- 15 out. And your pressure curve for the lower screen,
- 16 you're going to have an increase in pressure, but
- 17 we're going to want to see that pressure curve
- 18 flatten out.
- 19 Once both pressure heads have flattened
- out, that's where you have equilibrium, versus if
- 21 you pump and your head just keeps going up and up
- 22 and up in the lower screen, and in the upper screen
- 23 it keeps going down, and you're not able to -- you
- 24 know, your upper pump starts sucking air, for
- 25 example, and we won't have equilibrium. So what

- 1 you probably have to do is decrease your pump rates
- 2 if that's the case. All of this is spelled out in
- 3 the pilot test technical memorandum which is
- 4 visible on the website, as well as the basis of the
- 5 design report for the ground water circulation
- 6 well.
- 7 SPEAKER: So you want piezometers next
- 8 to the upper and lower screens in each well?
- 9 MR. WEATHERBY: No. You don't
- 10 necessarily have to use a piezometer. The way we
- 11 did it last fall, we did have a transducer in the
- 12 upper screen, and then all we had is a pressure
- 13 gauge on the pipe discharging to the lower screen
- 14 so we could just watch our pressure. Because you
- don't actually have -- there's a pressure increase
- 16 but there's no increase in water level, per se,
- 17 because it's all one aquifer. So you just need to
- 18 demonstrate that the pressures are equal.
- 19 You can actually monitor the draw-down
- in the upper screen if you put a transducer down
- 21 inside the bore hole. Or you know, a little
- 22 piezometer next to the bore hole would work as
- 23 well. That's what we did last fall. But a
- 24 transducer in the upper casing will work just fine.
- 25 And then the water that you are pumping back into

- 1 the lower screen, after the pump, if you have a
- 2 pressure gauge there, you'll be able to monitor
- 3 your pressure of your water being re-injected. And
- 4 what we're going to want to see is that that
- 5 pressure begins to flatten out, which will indicate
- 6 that the water is indeed being circulated.
- 7 So then the only other components are an
- 8 air stripping unit, and then the vapors from the
- 9 air stripping unit will go through vapor treatment.
- 10 And what we're envisioning is a carbon unit or two,
- 11 however many is necessary to do the job. And
- 12 because carbon will not remove vinyl chloride,
- 13 that's where we recommended you use zealite.
- 14 Zealite will remove vinyl chloride from the vapor
- 15 stream. And it's going to be a closed-loop system,
- 16 so the vapors coming off the air treatment system
- 17 will get passed back into the blower. So it's
- 18 going to be -- the air that is moving through the
- 19 blower is all going to be a closed-loop system.
- 20 SPEAKER: Is the contractor responsible
- 21 for the continuous replacement of the carbon
- 22 vessels?
- MR. WEATHERBY: Yes.
- 24 SPEAKER: Regardless of what the usage
- 25 is?

- 1 MR. WEATHERBY: Yes. And in fact. 2 during the one-year O&M, we will be doing sampling of the vapor coming off of the carbon unit and the 3 4 zealite units, collecting air samples and having 5 them analyzed for VOCs to try to determine the rate 6 at which the carbon units get used up. So that 7 will be a component that will be determined during 8 the one-year O&M. 9 So you're saying the oversight SPEAKER: contractor does the sampling, or does the O&M 10 11 contractor do it? 12 MR. WEATHERBY: The oversight -- URS 13 will be doing it. 14 SPEAKER: The sampling and the analysis? 15 MR. WEATHERBY: Yes. That will be our 16 responsibility. 17 SPEAKER: Who does the T&D of the 18 carbon? Is it included in the contractor's --19 MR. WEATHERBY: T&D? 20 SPEAKER: Transportation and disposal. 21 That will be the MR. WEATHERBY: Oh.
- 23 SPEAKER: What about the electrical
- 24 costs for running the system out?

O&M contractor.

22

MR. GOODMAN: I believe that's the O&M

- 1 contractor. I have just one minor clarification,
- 2 David, to what you said. The question was about
- 3 continuous replacement of the carbon.
- 4 SPEAKER: Periodic replacement.
- 5 MR. GOODMAN: Periodic replacement. We
- 6 didn't specify continuous, but the replacing is
- 7 part of the O&M.
- 8 SPEAKER: Another question on your
- 9 drawing on S-02. In the vault you show a water
- 10 level inside the vault. I don't understand that.
- MR. WEATHERBY: Basically, the way
- 12 similar systems like this have functioned in the
- 13 past is, the water coming out of the air stripping
- 14 unit just discharges into the vault, and then
- there's a sump pump in the vault that then pumps
- 16 the water back into the lower screen. We're not
- 17 requiring that. If you want to have it all hard
- 18 pipe so that the water coming out of the unit goes
- 19 right into a -- you know, back into a pump then
- 20 from there into the lower screen, that's fine as
- 21 well.
- 22 SPEAKER: Okay.
- MR. WEATHERBY: Any other questions?
- 24 SPEAKER: Excuse me. Are these -- for
- instance, the electrical bill and whatnot, that's

- 1 spelled out in the specifications?
- MR. WEATHERBY: It should be, yes.
- MR. GOODMAN: Who has responsibility for
- 4 it? Yeah.
- 5 SPEAKER: Okay.
- 6 MR. GOODMAN: Erik, do you recall the
- 7 reference for the O&M section in the specs?
- 8 MR. BAKKOM: Not off the top of my head,
- 9 no.
- MR. GOODMAN: I think it's towards the
- 11 end of it.
- MR. BAKKOM: I'll check it and get back
- 13 to you.
- MR. GOODMAN: Okay.
- SPEAKER: One other question. The drill
- 16 specs said that the bentonite should be tremied.
- 17 That would be, from my experience, sometimes
- 18 difficult.
- MR. WEATHERBY: Yeah. Off the cuff, I
- 20 don't think that would necessarily be required. I
- 21 think I would just want to say that as long as the
- 22 well is drilled and constructed in accordance with
- 23 WRD requirements, then we're okay with that. So if
- 24 WRD would allow you to pour the chips in with the
- 25 bag, just directly from the bag, that would be

- 1 fine.
- 2 MR. WEATHERBY: All right.
- MR. KALWEI: Last call for questions.
- 4 (No response)
- 5 MR. GOODMAN: I'm still waiting for Erik
- 6 to find that section in the specs.
- 7 SPEAKER: Do we know what power is
- 8 available there?
- 9 MR. WEATHERBY: Power, did you say?
- 10 SPEAKER: What power is available.
- MR. WEATHERBY: There's currently -- on
- 12 the south end of parcel B there is a power pole
- 13 with a transformer on the street and a wire going
- to a power pole on the site with a meter.
- 15 Previously that was used for running office
- 16 equipment and that type of thing. Whether it's got
- 17 sufficient power to run the treatment, the power
- 18 probably needs to be modified per the electrical
- 19 needs of the system.
- 20 SPEAKER: Do we know if it's three phase
- 21 or single phase?
- MR. WEATHERBY: I think it's three phase
- 23 currently. The existing power pole is shown on
- 24 drawing E-01. It's at the far right-hand side of
- 25 the drawing. It says existing power and telephone.

1 SPEAKER: You think that was a 480? 2 MR. WEATHERBY: I don't know. I know in 3 the past we used it to run work trailers out there 4 and that type of thing, but I don't know anything 5 about it other than that. There may be a meter number on it, so we might be able to go out there 6 7 today and get the meter number and call the city or 8 the county and then we'll know. 9 MR. GOODMAN: In response to the 10 question about whether or not the electrical costs 11 are included for the O&M contractor, under 12 Section 11201, paragraph 3.9, operation training 13 and manuals, there's a statement in here, C, that 14 specifies, "Contractor is responsible for all 15 operation, maintenance and repair for manufacturer 16 warranties and contractor system warranties during 17 the one-year operation period." 18 So electric costs, removal, replacement 19 of hardware would be included in operation, 20 maintenance and repair of the system. So it should 21 be included in there. 22 SPEAKER: I had a question on the 23 statement there, the manufacturer or the equipment 24 manufacturer of the warranty and contractor's 25 warranty. You know, you buy a pump or blowers and

- 1 then have a warranty of two years or something.
- 2 That's the manufacturer. Are you requiring a
- 3 different installation contractor to warrantee?
- 4 It's more of like a system-wide rather than a
- 5 single piece of equipment.
- 6 MR. GOODMAN: From the contractor --
- 7 SPEAKER: Yeah.
- 8 MR. GOODMAN: -- as opposed to the
- 9 equipment manufacturer, you mean?
- 10 SPEAKER: Yeah. I think that's the
- 11 distinction.
- MR. NEWBORE: What we're requiring is
- under I-14, equipment manufacturer (inaudible).
- MR. GOODMAN: Okay. Actually, there's a
- 15 couple responses to that. Under I-14, the
- 16 solicitation --
- 17 MR. NEWBORE: I think it was I-14.
- MR. GOODMAN: -- there is a requirement
- 19 to pass along, pass through the manufacturer
- 20 warranties. And under 11201, paragraph 3.10,
- 21 titled warranty, it specifies that "The contractor
- 22 shall provide a one-year warranty for all systems
- 23 equipment against defects and installation or
- 24 operation. This warranty shall be in addition to
- 25 the standard manufacturer warranty accompanying

- 1 each piece of equipment."
- 2 SPEAKER: Okay. I have one more
- 3 question.
- 4 SPEAKER: C of that section, too.
- 5 Paragraph C just below there, the one you just
- 6 read.
- 7 MR. GOODMAN: Was there a question on
- 8 it?
- 9 SPEAKER: I believe paragraph C talks
- 10 about the contractor has to warrantee the
- 11 performance of the overall system besides just the
- 12 equipment manufacturer's warranty.
- MR. GOODMAN: Right. Paragraph C -- do
- 14 you want me to read it?
- 15 SPEAKER: Just --
- MR. GOODMAN: I'll go ahead and read it.
- 17 It's pretty short. "The system warranty shall also
- 18 guarantee the performance of the system over the
- 19 operation period." There's some more language
- 20 about how it's to be assessed in terms of
- 21 monitoring results. And then the final sentence of
- 22 that paragraph, "Contractor shall provide all parts
- 23 and labor required for the system to meet the
- 24 minimum operating requirements outlined in these
- 25 specifications."

1 SPEAKER: I have a question. The 2 gentleman who spoke earlier said that in terms of 3 performance of the wells, he would be looking for 4 equilibrium between the rate of build-up and the 5 rate of draw-down. I just noticed, from seeing the 6 material, that it's high. And one of the two tests 7 that you did on the third step, you didn't actually 8 achieve equilibrium, and I just wondered if you 9 have any comment on that in relation to the 10 condition. 11 MR. WEATHERBY: Yeah. What we did is we -- during the pilot test -- the question was 12 13 that during our pilot test there was a pumping rate 14 where we didn't achieve equilibrium. Basically, we purposely did that; we pumped in a number of 15 16 different rates to try to find the range of pumping rates that you can achieve equilibrium within. 17 18 There's a maximum rate and a minimum rate, 19 basically. And the final rate that we proposed in 20 the base of design is kind of the middle rate, 21 essentially. 22 What happens, if you end up with a very 23 low pumping rate because the aguifer is tight, you 24 end up with really long circulation times. And a 25 circulating time of one year is kind of the maximum

- 1 circulation time. If it's taking longer than that,
- 2 it's not an appropriate method. But we definitely
- 3 demonstrated that we can circulate water with a
- 4 one-year circulation time. So that maximum pumping
- 5 rate simply exceeded the ability of the aquifer at
- 6 that point to circulate the ground water at that
- 7 rate.
- What we would like to see during the O&M
- 9 period as part of the contractor's requirements to
- 10 demonstrate circulation is to kind of pump the
- 11 system in a bunch of different flow rates and try
- 12 to find the ideal pumping rate for the well. So it
- 13 just depends on the specific aguifer
- 14 characteristics at GCW. But based on the previous
- investigations at the site, the aquifer is fairly
- 16 uniform across the entire site. So we're not
- 17 anticipating that we're going to drill a hole
- 18 somewhere and run into, you know, 30 feet of silt
- 19 when the rest of the site is essentially gravel.
- 20 So I guess the short answer to your
- 21 question is, yeah, if you pump these wells hard
- 22 enough, you will eventually hit a pumping rate
- where you're not able to circulate water at
- 24 equilibrium. So what we are going to be looking
- for is a pumping rate that's, you know, kind of in

- 1 the middle, or preferably kind of at the higher end
- 2 as possible, so circulating ground water.
- MR. GOODMAN: Any further questions?
- 4 Yes?
- 5 SPEAKER: Any additional water
- 6 chemistry? Because VOCs in (inaudible) or
- 7 parameters, iron, calcite, et cetera, that would
- 8 probably be a problem with the water.
- 9 MR. GOODMAN: Are you asking is there
- 10 data available on the ground water?
- 11 SPEAKER: Yeah.
- MR. WEATHERBY: Yeah, there is. We have
- data from (inaudible) parameters. And one of the
- 14 concerns of the design is whether or not operation
- of the GCWs would cause organic or inorganic
- 16 fouling. And in looking at the iron concentrations
- in particular, we don't believe the iron
- 18 concentrations that we're seeing there are high
- 19 enough to cause organic fouling. Other sites that
- 20 we've worked at that did have iron fouling had much
- 21 higher concentrations of iron in the water than
- 22 what we're seeing at the site.
- 23 And we also did the Ryznar calculation,
- 24 which is based on alkalinity and calcium and a few
- other parameters. This is all in the pilot test.

- 1 So I guess the bottom line is, we haven't seen any
- 2 major red flags with respect to a potential for
- 3 inorganic fouling.
- 4 SPEAKER: Thank you.
- 5 MR. GOODMAN: Okay. Did we get to your
- 6 question? I think --
- 7 SPEAKER: The O&M question?
- MR. GOODMAN: Yeah.
- 9 SPEAKER: Yeah.
- MR. ANTHAMATTEN: That was a question
- 11 you had asked before we gave the description of the
- 12 system.
- 13 SPEAKER: Right. He described the
- 14 system, yeah.
- MR. GOODMAN: Okay.
- MR. ANTHAMATTEN: Okay.
- MR. NEWBORE: Does anybody need any
- 18 restaurant directions or anything?
- 19 (No response)
- MR. ANTHAMATTEN: Again, thanks for your
- 21 attention. We're looking forward to seeing you out
- 22 at the site.
- MR. KALWEI: On the site, how are we
- 24 going to do that out there?
- SPEAKER: 1:00 o'clock.

- 1 MR. ANTHAMATTEN: Let's take a minute or 2 two and talk about that. 3 MR. GOODMAN: Okay. A couple things. 4 Be sure -- if you haven't been to the site, please 5 be sure and pick one of these up, because I've 6 modified what was the map on the solicitation. You 7 can't get to it from the way it appears you can. 8 And when you go outside the -- when you leave the 9 parking lot here onto 82nd, you take an immediate 10 right. You also have to then get into the left 11 lane to be able to take a left at the stoplight, 12 and there's a lot of traffic there. Just be aware 13 of that. As soon as you take that immediate right, 14 move into the left-hand lane. And now it would be 15 fairly easy, but around noon time it will be really 16 crowded. 17 There's no particular safety and health 18 requirements pertaining to access to the site. As 19 long as we stay on the gravel and paved roads on 20 the site, we'll be fine. I think there's no need 21 to deviate, to walk off of those to see what we 22 need to see at the site. And mostly it's just dress for the weather. And as long as the rain 23
- MR. ANTHAMATTEN: Similarly, describe

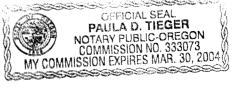
holds out, we should be okay.

24

- 1 it, how we're going there. Are we going to allow
- 2 them to tour that facility, or how are you going to
- 3 do it?
- 4 MR. KALWEI: I think what we've decided
- 5 is that when we get out to the site, we're going to
- 6 take a walk-through. If you want to walk with us,
- 7 fine. If you don't; you want to take off on your
- 8 own, you're welcome to do that. It's not a
- 9 requirement, but we very much encourage you to go
- 10 out and take a look at the site.
- MR. GOODMAN: The other thing I will
- mention also in terms of the -- there's a gate at
- 13 the north end -- the south entrance to the site.
- 14 We'll also open up the gate at the north so that we
- 15 can walk through there and get onto the ODOT
- 16 property so you can take a look at their facility,
- 17 because there are two circulation well systems to
- 18 be installed on that property as well, as shown on
- 19 the drawings. So we'll have that gate open.
- There's a -- right now we have to walk
- 21 across the site to get to that. It's not that long
- 22 a walk, so it shouldn't be a problem.
- MR. WEATHERBY: I just wanted to comment
- on that. You'll probably definitely want to look
- 25 at the ODOT property because construction of the

- 1 GCW is on the ODOT property. It's going to be a
- 2 little more challenging and we don't want to impact
- 3 ODOT or the paved areas and utilities. Parcel B
- 4 where the cap is going, that site is currently
- 5 vacant, so construction of the GCW there in terms
- 6 of things that you have to work around, there
- 7 aren't any you have to work around. But I highly
- 8 recommend looking at the ODOT property.
- 9 SPEAKER: Are there any underground
- 10 utilities at all?
- MR. WEATHERBY: On parcel B, no.
- 12 Parcel A, on that property, yes. It's likely on
- 13 parcel B that you'll encounter very high
- 14 beam (phonetic), and that's certainly possible.
- 15 But there are no active power utilities.
- MR. NEWBORE: You'll need to do a
- 17 utility locate anyway.
- MR. WEATHERBY: No known active
- 19 utilities.
- MR. ANTHAMATTEN: I think we're through.
- 21 Again, we deeply appreciate your interest in this
- 22 program. I'm looking forward to working with you.
- 23 Thanks very much.
- 24 ///
- 25 ///

1	(N.B.: As a matter of firm
2	policy, the stenographic notes and computerized backup of this transcript will be destroyed 5 years
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7	
8	I, Paula D. Tieger, a Registered Professional
9	Reporter and Notary Public for the State of Oregon,
10	do hereby certify that I reported in stenotype the
11	testimony and proceedings had upon the meeting of
12	this matter previously captioned herein; that my
13	said foregoing transcript, pages 1 to 55, both
14	inclusive, constitutes a full, true and accurate
15	record of all testimony reduced and proceedings had
16	upon the hearing of said matter, and of the whole
17	thereof.
18	Witness my hand this 10 day of apul,
19	2003.
20	
21	
22	Daula O Silcer
23	Paula D. Tieger, RPR No. 049268
24	
25	COTUDIAL SEAL



	A
أووا	ability 49:5
	able 9:13 16:9 26:20
	38:23 40:2 45:6
	49:23 52:11 about 3:7 4:15,16 5:15
	about 3: / 4:15,16 5:15
	5:16 6:3 8:1 9:2
	17:23 18:8,8 19:3,9 20:4,23 21:3 22:9,25
	23:20 24:18,20 29:9
	32:14,19 35:3,4
	32:14,19 35:3,4 41:23 42:2 45:5,10
	47:10,20 52:2
	absent 9:17
	absolute 7:17
	accept 4:2 5:12,14 24:20
	acceptable 17:11 28:7
	28:9
	access 9:12 15:20,22,24
	26:10 52:18
	accident-free 27:3
	accompanying 46:25
	accomplish 13:19
	accordance 43:22
	According 17:8 accurate 55:14
	achieve 48:8,14,17
	Acrobat 9:13
	across 49:16 53:21
	Action 1:4 3:6
	active 54:15,18
_	activity 9:23
	actual 19:8,12,15 20:21
	33:16 actually 5:7 15:18 30:6
	33:15 39:15,19 46:14
	48:7
	add 16:11
	adding 11:22
	addition 12:10 46:24
	additional 15:4,11,12
	28:1 29:5 31:24 50:5 Additionally 27:25
	address 5:2 9:4 31:19
	addressed 19:12
	adjacent 14:23
	adjustment 11:21 12:1
	12:5
	administrative 4:24
	Adobe 9:13 advantage 11:4,11
	advisement 17:14,16
	19:20
	aerial 18:24
	affect 27:22
	after 4:3 5:13,13 10:22
	10:25 15:10 17:16 25:12 28:3 32:23,25
	25:12 28:3 32:23,25 40:1
	again 28:2 31:18 51:20
l	54:21
	Ingainst 46:23
	Agency 3:4,14
- 1	

```
agenda 3:12
ago 6:3
agreement 11:2
ahead 3:1 6:22 16:20
  16:23 47:16
air 17:24,24 21:7 22:17
  31:4 35:23 36:21
  37:16 38:24 40:8.9
  40:16.18 41:4 42:13
Al 6:6.21
Alan 2:5 14:6
alkalinity 50:24
allow 34:5 43:24 53:1
allowing 31:3
along 3:22 46:19
already 5:24 24:25
  27:11 37:22
alternates 20:24,25
  21:4,22,22 22:9
  28:23
alternative 17:12 22:15
alternatives 28:22
although 3:23
amend 7:2 28:9 29:1
amended 28:23 30:9
amending 28:17 29:25
amendment 17:21 31:6
  31:20
amount 13:1
analysis 41:14
analyzed 41:5
announcement 10:23
another 30:5 42:8
answer 4:8,18 9:24
  11:15 17:25 23:5
  24:18 49:20
answered 34:13
answers 3:21
Anthamatten 2:3 3:1
  3:12 4:24 6:22,25
  7:25 9:8,24 10:20
  11:5,9,13,19 12:2,24
  13:10,13 14:1,3
  16:15,19,22 17:19
  24:17.24 25:6.20
  51:10,16,20 52:1,25
  54:20
anticipating 49:17
anybody 25:11 51:17
anyone 9:1 17:25
anything 9:21 16:11
 25:3 45:4 51:18
anyway 22:5 54:17
anywhere 9:7
apologize 18:10
apparent 10:12,21,23
  10:24 28:18,25
apparently 14:16 25:16
appear 25:16
APPEARANCES 2:1
appearing 55:2
appears 52:7
application 17:25 18:3
applies 12:3
```

appreciate 3:3,4 7:22 25:6.8 54:21 appropriate 49:2 approximately 14:14 April 1:18 31:12 aguifer 36:5 37:13 39:17 48:23 49:5,13 49:15 area 10:2 16:9.10 37:15 areas 54:3 arises 4:21 around 15:3 37:13,14 52:15 54:6,7 asked 3:21 18:7 25:21 51:11 asking 4:13 50:9 assessed 47:20 assigned 3:15 assume 7:11 assumed 7:14 **assuming** 32:6,15 assumptions 7:7,8,17 attached 9:10 10:5 attachment 8:12 10:9 10:18,21 attachments 8:8 9:19 attempt 4:18 attend 3:10 attention 8:8 13:16 26:6 51:21 available 9:6,9,11 31:15 44:8,10 50:10 Avenue 8:22 avid 3:19 awarded 10:7 32:24,25 aware 27:20 52:12 away 26:3 a.m 26:25 В **B** 10:21 14:14,23 44:12 54:3,11,13 back 12:25 17:16 20:1 22:1 24:7 25:12,18 25:23 34:17 36:4 39:25 40:17 42:16,19 43:12 backup 55:2 bag 43:25,25 **Bailey** 6:15 Bakkom 2:8 6:19,24 24:11,14 29:17,22,24 30:2,5,8 33:22 43:8 43:12 balance 37:3 base 26:17 48:20 based 7:10 49:14 50:24 basic 35:20 **basically** 5:6 10:10 12:7 42:11 48:14,19 **basis** 39:4 beam 54:14 before 25:24 33:5

51:11 55:3 begins 40:5 behalf 3:3 being 8:25 37:1,2 40:3 40:6 believe 10:8 18:9 23:13 27:21 29:22 33:15 41:25 47:9 50:17 below 36:21 47:5 beneficial 35:8 bentonite 43:16 besides 9:7 47:11 between 26:15 36:16 48:4 **bid** 8:12,17,19 12:8,9 12:10,18,25,25 13:1 13:2.4 17:4 18:13 19:9,13,14,24,25 21:16,23,24 22:12,14 bidder 10:6,12,13,16 10:22,23,24 21:15 26:17 28:18,25 bidders 9:25,25 28:16 28:25 bidder's 8:10 bids 8:23 29:2 bill 42:25 bit 3:11 18:15 block 32:7.12.16 blower 22:18.20.20 40:17,19 **blowers** 45:25 board 10:5 bond 12:18.25 **bonded** 8:17 bonds 8:18 bore 17:8,10 28:6 39:21.22 borrow 13:24 boss 5:20 both 20:15 24:2 38:19 55:13 bottom 51:1 boulders 27:10 break 5:16 23:21 25:5 25:9,12 27:25 34:11 Bremer 8:21 brief 4:3 5:9,10 14:9 25:19 35:5 briefly 8:1 **bring** 16:9 build 19:24 36:15 **build-up** 48:4 **built 27:9** bunch 49:11 burden 10:3 business 11:7,10,12,25 12:7,8,10,11,13,15 13:18 31:13 34:5,9 businesses 11:4 12:4,6 buv 45:25 \mathbf{C} C 13:8 45:13 47:4.5.9

47:13 calcite 50:7 calcium 50:24 calculation 50:23 calculations 19:10 28:13,15 call 14:13.23 26:5 44:3 called 15:24 36:5 37:9 cap 14:13,16 15:16 20:15 54:4 captioned 55:12 carbon 22:18 40:10,12 40:21 41:3,6,18 42:3 cards 4:14 care 3:20 6:24 carefully 27:5 case 39:2 casing 6:9 36:19 37:13 37:15 39:24 Casing/Hall 1:3 3:6 cause 50:15.19 cell 37:13 Central 31:13 certain 7:7.8 certainly 54:14 certificate 55:3 certification 13:23 30:18 certifications 13:15 **certified** 12:3 26:7 certify 13:20 55:10 cetera 50:7 challenging 54:2 chance 4:6 characteristics 49:14 charge 5:23 check 26:9 43:12 checklist 8:11 chemical 18:23 24:2 chemistry 50:6 chip 27:15 chips 43:24 chloride 23:23 30:11 40:12,14 circulate 37:9,25 49:3 49:6.23 **circulated** 37:15 40:6 **circulating** 18:4 48:25 50:2 circulation 7:15 10:1 14:22 15:3,9,18 19:1 20:16 28:6 35:24 36:1 37:10.12.20 39:5 48:24 49:1,4,10 53:17 city 5:24,25 6:4 45:7 **Clackamas** 26:12.16 clarification 22:13 24:7 42:1 clarify 21:18 22:2 clause 13:8 30:15 clean-up 21:1 clear 7:19 20:18 29:6 **close** 31:12

closed 16:4 closed-loop 40:15,19 collecting 41:4 Come 16:18 coming 25:12,13 40:16 41:3 42:13.18 comment 48:9 53:23 comments 13:11 Company 1:3 3:7 comply 20:25 **component** 14:17,20 15:7 20:4,7,9,12 41:7 components 14:10 15:13,14 40:7 computerized 55:1 concentrations 50:16 50:18,21 concept 21:2 conceptual 22:10 concerned 33:13 concerns 11:25 50:14 concrete 27:10 condition 48:10 **conditions** 7:13 36:9 confer 22:1 24:6 conference 1:16 5:5 7:2 consider 31:3 consideration 3:24 considered 36:25 consist 14:13 consists 14:21 15:8 constituents 18:13 19:4 constitutes 55:14 **constructed** 27:8 43:22 constructing 14:18 construction 6:20 14:11.12 15:10 16:3 16:5.7 19:8 32:8 53:25 54:5 contaminants 18:24 contamination 18:6 19:3 36:11 continue 25:22 continuous 40:21 42:3 contract 5:9 6:1 8:6 11:2.20 13:16 19:22 20:5,8,12 21:24 23:6 24:1,19,25 37:7 **contracting** 3:14 11:22 contractor 9:18 19:11 19:23 20:19.25 21:19 23:2 29:11,13 32:14 34:6 36:15 37:8 38:5 40:20 41:10,11,22 42:1 45:11.14.16 46:3,6,21 47:10,22 contractor's 41:18 45:24 49:9 contracts 5:23 6:2,4 contract's 32:23.25 control 22:23 controlled 15:21 controls 22:21 coordinate 26:22

coordination 26:15 copies 9:14 25:15 correct 11:8 23:11 cost 22:11 23:5 costs 21:11.14 22:11 35:1.10 41:24 45:10 45:18 counsel 55:3 county 26:12,16 45:8 55:6 couple 26:1,24 46:15 52:3 court 16:25 cover 25:4 31:7 covered 29:16 crews 19:11 crossing 27:18 crowded 52:16 **CSR** 1:20 cuff 43:19 current 29:14 currently 15:23 16:4 28:15 29:3 44:11,23 curve 38:14,15,17

D 1:20 55:8,23 darn 27:5 data 50:10.13 date 24:19 31:10 55:2.4 dated 18:19.21 dates 33:12,14 David 2:7 6:18 42:2 day 27:20 55:4,18 days 29:2 34:1,2,5,8,9 deadline 24:16 **Debbie** 6:14 debris 27:14 decided 53:4 decrease 39:1 **deeply** 54:21 defects 46:23 definitely 49:2 53:24 deliverable 33:11 delivery 34:6 demonstrate 37:8 38:8 39:18 49:10 demonstrated 49:3 demonstration 37:19 Department 14:24 15:15 17:9 28:11 **depending** 5:16 7:4 depends 49:13

depth 36:11

depths 36:1

51:13

51:11

describe 52:25

DÉQ 6:14,15 15:19

described 13:20 35:16

description 5:10 16:12

design 5:11 14:5 17:6

20:4,7,9,12,14,21,22

21:10.12.20 22:10 28:12.14 32:1.18.20 39:5 48:20 50:14 designed 23:12 36:14 designs 32:5,6 design/build 19:22 20:10 destroyed 55:2 destruction 30:10 detailed 17:8 details 8:3 determination 10:13 determine 37:24 41:5 determined 10:14 36:12 38:1 41:7 develop 7:6 developed 38:9 deviate 52:21 different 46:3 48:16 49:11 difficult 43:18 directions 25:15 51:18 directly 31:21 43:25 disadvantaged 11:16 11:24 12:3,6,7,11,12 discharges 42:14 discharging 39:13 discussing 17:17 discussion 35:5 disposal 41:20 disqualified 18:1 distinction 46:11 distribution 36:10 documents 9:20 17:4 18:17 21:23,24 doing 26:23 41:2,13 dollars 12:21 13:3 done 5:3 18:25 19:5 33:2 donut-shaped 37:14 down 4:17 26:11 34:17 38:23 39:20 draw 8:7 drawing 35:20 42:9 44:24,25 drawings 7:22 9:6,8,9 14:5 53:19 draw-down 38:11,14 39:19 48:5 dress 52:23 drill 43:15 49:17 drilled 43:22 driven 18:5 drop 38:10 dry 22:22 during 15:3 16:5 18:25 26:13 27:19,25 41:2 41:7 45:16 48:12,13 49:8

earlier 31:8 48:2 easy 15:22 52:15 eight 6:10 either 17:10 22:10 elaborate 37:18 electric 45:18 electrical 20:22 41:23 42:25 44:18 45:10 elements 21:12 encounter 54:13 encourage 3:10 4:16 31:18 53:9 end 4:14 5:11 43:11 44:12 48:22,24 50:1 53:13 engineers 6:19 engineer's 12:22 34:7 enough 20:4 25:16 35:16,18 49:22 50:19 **entire** 49:16 entrance 53:13 **Environmental** 3:3.13 envision 36:18 envisioning 40:10 **EPA** 6:4,6,8 9:9 15:20 27:16 EPA's 7:20 equal 39:18 **equilibrium** 37:4 38:1 38:20.25 48:4.8.14 48:17 49:24 equipment 19:11 20:20 20:22 21:2,4,8 28:23 44:16 45:23 46:5.9 46:13,23 47:1,12 Erik 2:8 6:19 43:6 44:5 essentially 14:9 35:22 37:24 38:5,11 48:21 49:19 estimate 12:23 et 50:7 evaluate 11:22 29:5 Evaluation 11:21 events 5:4 eventually 38:14 49:22 every 3:10 everybody 25:17 31:15 31:18 35:13 everything 33:2 example 38:25 exceeded 49:5 exceeds 13:21 **except** 11:24 excess 27:14 excluding 34:6 excuse 20:3 25:9 42:24 existing 44:23,25 exits 36:8 expect 9:25 expecting 38:4 experience 9:17,22 43:17 experienced 7:15 9:25

39:8 47:1

extend 7:6 extent 7:5 18:5,25 extraction 17:6,7 e-mail 5:2 31:19,20 E-01 44:24

F 33:11 34:4 facility 15:1,1 53:2,16 fact 38:2 41:1 factor 11:23 36:24 fairly 6:12 49:15 52:15 fall 37:22,24 39:11,23 familiar 6:12 7:12 8:7 far 4:21 23:2 33:12 44:24 fast 4:10 feel 7:17 8:14 22:10 feet 49:18 few 50:24 filed 8:21,23 fill 13:19 26:5 final 47:21 48:19 find 16:19 24:25 26:4 44:6 48:16 49:12 fine 39:24 42:20 44:1 52:20 53:7 finished 4:3 firm 10:11,14 55:1 first 3:2 4:18 16:21 28:5 fit 21:7 five 34:1,2,5,8,9 flags 51:2 flatten 38:18 40:5 flattened 38:19 flattens 38:14 floor 9:1 16:20 flow 18:3 35:24 36:5,6 36:12 49:11 flv 4:20 follow 3:24 following 55:2 follows 8:6 foregoing 55:13 forget 4:11 format 8:6.7 forward 4:17 51:21 54:22 fouling 50:16,19,20 51:3 four 16:15 four-month 32:7,16 free 7:17 frequency 22:22 frequent 27:19,22 from 3:7 4:9 6:14 11:24 13:23 16:20 20:10 26:12,25 30:11 34:6 35:23 36:19.22 37:1 37:11 38:6 40:8.14 42:20 43:17,25 46:6 48:5 50:13 52:7 55:2 55:3

10:2

each 5:12 7:19 10:3

13:24 34:4 35:25

full 55:14 fully 23:7 function 35:16 functional 23:7 functioned 42:12 further 50:3 F-1 33:10

G Gary 2:6 6:17,24 23:14 24:9 25:25 gate 15:24,25 16:3 53:12,14,19 gates 15:23 gauge 39:13 40:2 gave 51:11 GCW 49:14 54:1.5 GCWs 50:15 general 23:10 35:15 generic 23:3 gentleman 28:1 34:10 48:2 gentlemen 6:22 gets 37:15 give 3:11 4:5.7 5:6.8.10 5:16 13:17 25:7 29:16 35:14 given 12:6 **go** 3:1,5 6:22 8:3 11:12 12:12 15:17 16:13,20 16:23 25:24 27:23 31:22 35:12,19 36:20 40:9 45:6 47:16 52:8

53:9 goal 21:1 goes 10:15 16:8 20:23 21:5 42:18 going 3:25 4:4,7 5:5,6,8 5:18 6:13 7:2.9.11.14 8:3.16 9:4 10:11 12:9 14:4 15:17 16:2,2,3,6 16:6 17:1,15 19:23 21:25 23:5,20 25:13 25:22 26:6,11 27:8,9 27:23 29:1,11 32:1,6 35:3 38:12,16,17,21 38:23 40:4.15.18.19 44:13 49:17,24 51:24 53:1,1,2,5 54:1,4 gone 9:19 good 8:14 14:7,8 25:21 26:4 29:2 Goodman 2:5 5:10 6:6

6:6 14:4,7 16:16,21

20:9,14 21:3,17,25

16:23 18:15,21 20:6

22:6 23:9,13,17 24:6

24:12 25:3,11,22,23

27:17 29:8,20,23,25

31:23 32:3,13 33:6

34:4,9,19,24 35:2

33:14,18,21,24 34:2

41:25 42:5 43:3,6,10

30:3,7,13,18,21

43:14 44:5 45:9 46:6 46:8,14,18 47:7,13 47:16 50:3,9 51:5,8 51:15 52:3 53:11 **government** 5:19 8:5 gravel 14:18 49:19 52:19 ground 7:15 10:1 14:21 15:5.8.17 18:3.13.18 18:24 19:1 20:15 30:23 35:23,24,25 36:12,22 37:9,10,25 39:5 49:6 50:2,10 guarantee 13:2 47:18 guarantees 13:1 guess 7:14,22 8:24 13:17.18 18:11 21:5 49:20 51:1 guys 4:11

H habitat 27:9 hand 55:18 hands 4:5 hang 35:11 happen 26:21 32:16 happens 48:22 hard 42:17 49:21 hardware 45:19 hate 26:19 having 14:3 31:21 41:4 head 38:21 43:8 heads 38:19 health 27:2,4,5 52:17 healthy 12:18 heard 20:10 hearing 55:16 heater 21:9 heavy 16:9.10 held 25:19 26:19 help 21:11.13 Her 3:16 hereto 55:3 high 48:6 50:18 54:13 higher 50:1,21 highly 54:7 hit 49:22 holding 15:19 holds 52:24 hole 17:8,10 28:6 39:21 39:22 49:17 hopefully 26:14 hurt 35:7

idea 3:12 32:10 35:15 ideal 49:12 identify 18:23 immediate 52:9,13 impact 54:2 important 36:24

improvements 27:18

hvdraulically 36:17

inaudible 46:13 50:6 50:13 inches 17:10 28:8 include 5:2 7:3 19:10 21:12.15 30:9 included 41:18 45:11 45:19.21 includes 14:17 15:4 inclusive 8:13 55:14 increase 38:12.16 39:15,16 indeed 37:25 40:6 indicate 40:5 indicates 17:7 individual 10:3 informal 3:23 **information** 18:16,18 28:16,19 29:6 injection 36:4 inorganic 50:15 51:3 inside 39:21 42:10 installation 46:3,23 installed 22:14 34:17 37:7,23 53:18 installing 7:15 instance 21:6,9 22:17 42:25 instead 8:24 instructions 8:12 instrumentations 22:21 insulation 14:21 **insure** 7:19 integral 9:10 intended 8:13 19:14 21:2 intent 11:3 intention 5:15 intentions 3:18 interest 3:4 54:21 interested 27:3 Internet 9:12 introduce 5:7.8.19 6:23 introduction 5:6 investigations 49:15 invitation 25:2 invite 3:9 iron 50:7,16,17,20,21 irrelevant 8:25 isolate 36:17 issue 4:25 11:1 17:17 issues 9:1 item 26:10 items 26:24 27:5 I-14 30:15 46:13,15,17 **I-6** 13:1,7,8

J J 2:6 January 18:20,22 job 26:4 40:11 just 4:12,17 8:1 13:18 16:15 20:10 21:18 22:3 23:5 24:7 25:9 33:11 35:2,14 38:21 39:14,17,24 42:1,14 43:21,25 47:5,5,11 47:15 48:5,8 49:13 52:12,22 53:23

K Kalwei 2:4 5:20,22,22 10:10.19 12:5,16,25 13:7.25 16:18 17:1 17:15 19:16.19 20:1 22:13 23:19 25:17 30:14,19 31:9 34:20 34:23 35:8,18 44:3 51:23 53:4 Kansas 5:23,25 6:4 keep 4:12 9:3 keeps 38:21,23 kev 26:8 keys 26:3 Kim 8:21 kind 3:23 7:12 19:21 21:12 22:19 30:15 35:17 37:14 38:3 48:20,25 49:10,25 50:1 knockout 30:23 31:3 34:15 know 5:24 19:23 20:3 20:12 22:22 26:22 30:1 38:14,24 39:21 42:19 44:7.20 45:2.2 45:4,8,25 49:18,25 known 54:18

labor 47:23 lag 33:4 landowner 13:23 lane 52:11,14 language 33:15 47:19 large 12:8,10 Larry 2:4 5:20,21,22 last 8:10,12 19:6 20:11 31:10 37:22,24 39:11 39:23 44:3 later 3:8 6:12 lavout 19:11 least 8:14 25:8 leave 52:8 leaves 25:11 left 5:20 6:19 18:10 27:16 52:10,11 left-hand 52:14 less 12:21 13:3 let 4:1 5:7,18 14:4 let's 3:1 16:23 17:13 19:19 28:11 29:8 35:19 52:1 level 39:16 42:10 lieu 17:24

lift 17:24,24

like 3:2 5:2 7:25 9:1,15

12:17,18 21:6 25:25

35:13,17 42:12 46:4 49.8 likely 54:12 line 51:1 lines 3:22 liquid 30:22 31:3 list 31:16 listed 10:8.18 **listing** 18:12 little 3:11 25:20 39:21 locate 13:19 54:17 located 8:22 location 8:19 18:9 locations 27:12 long 27:21 32:11 33:19 43:21 48:24 52:19.23 53:21 longer 25:20 49:1 Longfield 15:25 16:4,6 26:11 27:23 long-term 22:11 look 11:14 33:6.20 53:10,16,24 looking 23:8 29:18 48:3 49:24 50:16 51:21 54:8,22 lot 4:10 22:24 25:10 52:9.12 low 10:12,12,22,23,24 26:17 28:18.25 48:23 lower 12:11 21:11,13 36:2,4,7,23 37:12 38:9,12,15,22 39:8 39:13 40:1 42:16,20 lowest 10:15 lump 21:15 L-11 13:18

M made 7:8 10:14 11:25 mail 23:6 main 18:6 maintained 15:2 maintenance 14:12 15:8,13 45:15,20 major 51:2 make 8:14 10:22 26:18 26:22 29:4 31:16 making 7:7 manager 6:9 manuals 45:13 manufacturer 23:24 24:3,8,13 30:16 45:15,23,24 46:2,9 46:13.19.25 manufacturer's 47:12 many 9:14 40:11 map 52:6 maps 25:14 matches 26:19 material 10:25 13:20 26:5,7 48:6

materials 10:8 13:19

Mather 16:1 matter 27:11 55:1,12 55:16 maximum 48:18,25 49:4 may 6:20 7:4,4,5,6 8:20 23:6 26:20 27:14 33:1 45:5 mavbe 6:11 mean 4:19 19:21 20:18 22:24 32:9 46:9 meaning 20:20 means 35:25 meet 29:12 47:23 meeting 17:2 55:11 meets 13:20 memorandum 19:2 39:3 mention 26:1 53:12 mentioned 7:1 10:18 meter 44:14 45:5.7 method 49:2 middle 48:20 50:1 Midwest 4:10 might 20:25 21:7,7,10 26:21 45:6 mile 3:7 million 12:20,23 13:3 mind 4:5 5:1,18 9:3 24:21 minimum 28:8 47:24 48:18 minor 42:1 minute 5:7 8:1 9:4 11:15 52:1 minutes 25:8,21 miscellaneous 9:20 modifications 21:19 modified 44:18 52:6 modify 3:18 modifying 22:10 moisture 30:23 34:15 momentum 5:17 Monday 27:1 monitor 39:19 40:2 monitored 18:22 monitoring 9:22 15:5,6 18:19,25 47:21 more 6:11 19:4 23:5,19 37:18 46:4 47:2,19 54:2 morning 3:9 5:5 6:13 14:8 most 15:17 26:2 36:13 mostly 52:22 move 4:19 52:14 moving 40:18 much 19:4 25:7 50:20 53:9 54:23 multiple 37:16 Multnomah 55:6 must 13:18

name 3:12 5:22 nature 7:5 18:5 19:22 necessarily 39:10 43:20 necessary 40:11 need 11:14 15:2.21 16:7 21:25 24:21 26:6 27:8,15 37:3,3 38:7 39:17 51:17 52:20.22 54:16 needs 36:21,24 44:18 44:19 Newbore 2:6 6:17.17 17:3,13 23:15 24:10 25:25 26:2 29:18 32:18,23 33:17,20,23 35:7.11 46:12.17 51:17 54:16 next 10:15 20:23 24:21 39:7.22 nods 35:19 non-haz 26:7 non-responsible 10:15 non-responsive 18:2 noon 5:15 8:23 52:15 normal 36:6 north 15:24 26:12 53:13.14 Northwest 1:3 3:6 6:9 6:15 notarized 13:22 Notary 55:9 note 4:14 8:18 13:22 28:2 notes 55:1 notetakers 3:19 notice 11:2,3 32:9 33:1 55:3 noticed 48:5 number 15:4 45:6.7

O objective 7:18 objectives 7:20 October 31:12 **ODOT** 14:25,25 15:14 53:15,25 54:1,3,8 off 11:17 15:24,25 26:11 40:16 41:3 43:8,19 52:21 53:7 **offer** 7:6 offerer 10:4 offers 11:22,23,24 office 5:23 6:7.16 15:1 44:15 officer 11:22 officers 3:14 office's 6:4 off-site 13:24 Oh 35:2 41:21 okay 14:3 17:18 21:25 23:9 27:16,23 28:4 29:8,10 30:13,21

48:15

N.B 55:1

31:23 33:23 34:10.20 34:20.23 42:22 43:5 43:14,23 46:14 47:2 51:5,15,16 52:3,24 once 37:7 38:19 one 3:10.14 4:6.7.8.8 4:12 11:24 13:13 15:9 16:24 17:21,23 20:2 22:3 26:4,24 27:17 37:6 39:17 42:1 43:15 47:2.5 48:6,25 50:13 52:5 one-year 41:2,8 45:17 46:22 49:4 only 10:11 17:9 25:15 26:25 28:18,24 31:9 40:7 onto 26:10 52:9 53:15 open 9:1 53:14,19 opening 13:4 operate 26:25 operating 15:1 47:24 operation 14:11 15:8 15:12 45:12,15,17,19 46:24 47:19 50:14 operations 6:7 operator 9:18 opportunity 3:8 opposed 29:3 46:8 option 15:11 order 19:24 **Oregon** 6:1,7,14,15 14:24 15:15,18 28:10 55:5.9 organic 50:15.19 oriented 19:4 other 10:8 13:10,25 14:1 22:21 23:17 26:24 31:9 34:24 40:7 42:23 43:15 45:5 50:19,25 53:11 Others 18:7 otherwise 55:3 ought 26:16 out 6:4 7:21 9:17 13:14 16:5 23:4 24:23 27:5 31:1 36:8 38:15,18 38:20 39:2 40:5 41:24 42:13,18 43:1 45:3,6 51:21,24 52:24 53:5,10 outlined 47:24 outside 52:8 over 3:5 6:2 14:13 47:18 overall 21:11 33:14 47:11 oversight 6:21 41:9,12 overview 5:4,9 14:5,9 own 27:7 53:8 owned 14:24 15:15,18

41:25 42:7 43:7 45:11 49:8 51:7 o'clock 8:20 25:14 51:25 P **pace** 7:9 package 8:19 18:14 30:20 packer 36:16 page 8:10 9:7 13:1,7 29:3 33:10 pages 55:13 paragraph 13:8 28:14 28:20,22 33:25 45:12 46:20 47:5,9,13,22 parameters 50:7,13,25 parcel 14:14,15,23 15:15,16 44:12 54:3 54:11.12.13 **Pardon** 23:16 parking 52:9 part 8:18 9:11 14:12,22 14:23 15:20 19:15,21 21:10 24:1 30:24 42:7 49:9 particular 36:10 50:17 52:17 particularly 8:7 parts 47:22 party 55:3 pass 4:17 46:19.19 passed 40:17 past 42:13 45:3 Paul 2:3 3:12 16:13 25:4 Paula 1:20 7:1 55:8,23 paved 52:19 54:3 pay 13:16

people 27:20 29:16 per 4:13 39:16 44:18 percent 11:4,11,14,17 11:23 12:19,20 13:2 perform 24:2 performance 23:11,12 23:25 29:12,15,19 33:11 47:11,18 48:3 period 10:25 15:9 19:1 45:17 47:19 49:9 Periodic 42:4,5 permits 27:7 person 3:23 10:6 personnel 5:19 pertaining 34:14 52:18 phase 44:20,21,22 phonetic 54:14 pick 52:5 picked 9:16 27:16

piece 46:5 47:1

pieces 9:4 14:11.12

piezometers 39:7

piles 27:9

piezometer 39:10,22

pilot 19:2,5 37:21,23

39:3 48:12.13 50:25 pipe 1:3 3:6 6:9 39:13 42:18 plan 26:16 27:2,6 planning 25:12 plans 17:8 27:4 32:21 please 4:8,20,25 7:17 9:3 13:6,16 25:17 26:21 31:18 52:4 plotted 36:7 point 7:23 8:21 9:2 13:14.17 16:5 30:14 pole 44:12,14,23 policy 55:1 portion 33:10 Portland 6:1.8 possible 50:2 54:14 post 31:17 posted 8:2 18:16 poster 10:5 potential 51:2 pour 43:24 power 44:7,9,10,12,14 44:17,17,23,25 54:15 preferably 50:1 preference 12:14 presentation 7:9 presentations 4:4 5:12 presented 8:20 pressure 38:8.10.13.15 38:16,17,19 39:12,14 39:15 40:2.3.5 pressures 39:18 pretty 12:17 20:18 26:4 27:5 32:11 47:17 previous 49:14 previously 44:15 55:12 **PRE-BID** 1:16 pre-construction 19:15 price 11:23 12:5 13:2 22:11 primary 7:18 principal 16:7 print 9:14 probably 4:11 8:25 39:1 44:18 50:8 53:24 problem 15:21 50:8 53:22 problems 26:15 procedure 24:15 procedures 33:25 proceed 11:2 16:23 32:9 33:1 proceedings 3:17 7:4 55:11,15 process 1:3 3:7 4:22 13:14 17:24,24 21:8 32:21 35:4 procurement 8:16,17 produce 3:16 4:9 10:4 10:7,24 **Professional** 55:8

program 54:22

O&M 21:11,13 22:11

35:1,9 41:2,8,10,22

owner 26:8

owner's 34:7

project 6:8,20 14:9,10 15:7,14 16:12 22:12 23:11 26:1 32:17 property 14:15 15:2,19 26:7 53:16,18,25 54:1.8.12 proposal 7:7 propose 20:25 21:19 proposed 13:24 48:19 proposes 18:1 proposing 30:25 pros 26:2 prospective 10:3 **Protection 3:4,13** protocol 3:24 provide 14:4 22:12 28:10,16,17,19 29:4 46:22 47:22 provided 4:14 29:10 31:5 PR-R7-03-10050 1:1 Public 55:9 publish 9:14 17:20 pump 19:11 22:23 34:16 36:18,24 38:5 38:6,11,21,24 39:1 40:1 42:15,19 45:25 49:10.21 pumped 30:25 36:2 48:15 pumping 36:25 37:24 39:25 48:13,16,23 49:4,12,22,25 pumps 42:15 purpose 3:5,16 7:18 30.4 purposely 48:15 purposes 5:1 16:1 put 7:21 14:16 24:23 31:20 39:20 putting 21:9 **p.m** 27:1

qualifications 9:17 10:17 qualified 10:2 question 4:6,7,8,12,13 4:17,21 11:6,15 17:5 17:22,23 18:7 20:11 20:23 21:3,18 22:7,9 23:22 28:5 29:9,10 29:11 30:22 31:10,14 34:13 35:9 42:2,8 43:15 45:10,22 47:3 47:7 48:1,12 49:21 51:6,7,10 questions 3:21 4:3.18 4:20,21 5:13,14 7:5 7:18,23 9:2 13:10,25 14:1 16:13,14,20,24 16:24 17:20 18:8 22:2,7,25 23:17,20 24:16,20 25:21 27:24

0

28:1,4,12 29:6 31:7 31:11,24 34:11,24 42:23 44:3 50:3 quick 35:19 quickly 8:11 quite 18:15

R railroad 27:18.19 rain 52:23 raise 4:4 28:2 34:12 raised 27:25 ran 25:20 range 48:16 rate 37:2 41:5 48:4,5 48:13,18,18,19,20,23 49:5,7,12,22,25 rates 36:25 39:1 48:16 48:17 49:11 rather 10:3 46:4 read 8:16 11:18 28:24 33:7,18 47:6,14,16 reader 9:13 reads 28:15 real 17:1 35:19 really 8:11 48:24 52:15 reason 37:9 recall 12:18 17:22 18:7 43:6 receive 31:21 received 10:22 55:3 recess 25:19 recognize 4:6 recommend 22:14 36:16 54:8 recommended 40:13 recommending 22:15 reconfiguring 27:12 record 3:21 28:3 55:15 red 51:2 reduced 55:15 redundant 8:25 reference 19:17 43:7 references 10:7 30:16 referring 33:12 regarding 23:22 28:12 30:22 33:15 Regardless 40:24 **Region** 3:13 6:2,3 8:22 regional 6:15 Registered 55:8 relate 21:18 related 28:12,21,25 relating 26:1 relation 48:9 remaining 19:3 remedial 1:4 3:6 9:23 remembered 35:2 removal 23:24 24:2 30:11 45:18

remove 35:22 36:19

37:16 40:12,14

removed 30:24 37:1

removing 37:10

repair 45:15.20 repaying 26:12 repeat 13:5 replacement 40:21 42:3,4,5 45:18 replacing 42:6 report 18:19,21 39:5 reported 1:20 55:10 reporter 16:25 55:9 representative 6:14 requests 9:21 require 18:2 29:2 37:19 required 10:12 13:4,23 27:2 28:19,24 29:12 29:14 43:20 47:23 requirement 9:20 10:4 10:5 12:2,18 13:14 46:18 53:9 requirements 5:9 7:21 8:15 10:21 13:21 18:4 28:11 29:12 37:6 43:23 47:24 49:9 52:18 requires 17:9 requiring 42:17 46:2 46:12 residential 16:8 resources 17:9 28:10 respect 51:2 respond 17:22 28:4 33:7 35:6 response 4:23 7:24 13:12 14:2 23:18 28:8 29:7,13 34:25 44:4 45:9 51:19 responses 25:24 27:24 46:15 responsibility 10:11,13 41:16 43:3 responsible 27:6 40:20 45:14 rest 49:19 restaurant 51:18 restoration 14:19 result 7:1 results 47:21 return 34:17 returned 31:4 36:3 reverse 18:3 35:24 36:5 36:12 review 32:1,4,5 33:5,16 34:5,7 reviewed 7:12 11:1 re-inject 38:7 re-injected 36:23 37:3 40:3 re-injecting 37:11 rid 34:16 right 11:5 16:12 20:16 21:21 25:4 26:3 29:17 30:7 31:2 32:3

right-hand 44:24 road 15:25 16:1,4,6,7,8 27:17,23 roads 52:19 roadways 14:18 roughly 12:23 RPR 1:20 55:23 run 5:15 24:2 35:14 44:17 45:3 49:18 running 41:24 44:15 run-on 4:9 Ryznar 50:23

safety 27:2,4,5 52:17 same 28:21 samples 41:4 sampling 41:2,10,14 satisfactorily 11:1 Saturday 27:1 saying 41:9 says 21:22 22:22 24:25 28:15 31:11 34:4 44:25 schedule 26:18 32:8 screen 36:2,3,4,7,8,20 36:23 37:2,11,12 38:6,10,12,15,22,22 39:12,13,20 40:1 42:16,20 screened 36:1 screens 36:17,17 38:9 39:8 se 39:16 search 24:19 Seattle 6:4 18:10 second 13:18 14:20 21:17 22:8 26:10 30:24 35:11 section 3:15 19:18 21:21 26:13 28:13.21 29:15,23 30:1,1,2,5,8 33:11,19,24 36:20,23 43:7 44:6 45:12 47:4 see 14:8 26:3,19 28:11 29:8 33:8 34:3 36:15 38:13,17 40:4 49:8 52:21,22 seeing 48:5 50:18,22 51:21 seen 16:16 35:18 51:1 select 20:20 selected 27:13 32:13 sentence 4:9 47:21 September 33:3 set 37:12 set-aside 11:8,10 several 14:21 21:6 shallow 36:11 sheet 5:3 31:15 short 17:2 25:4 32:11 47:17 49:20

show 42:9

shown 44:23 53:18

side 17:10 44:24 sign 25:17 31:18 signed 4:25 signing 24:4 sign-in 5:3 sign-up 31:15 silt 49:18 similar 42:12 Similarly 52:25 simple 38:5 simply 49:5 single 44:21 46:5 sir 9:5 11:6 site 3:9 6:8,9,10,12 9:12 14:14,18,20,22 14:24 15:5,20,22,23 16:1,2 18:5,6 25:13 26:11,20,24,25 27:3 27:8,11,16 36:9,11 36:13 37:23 38:2 44:14 49:15,16,19 50:22 51:22,23 52:4 52:18,20,22 53:5,10 53:13,21 54:4 sites 50:19 Sixth 8:22 size 21:8 22:20 sizes 21:6 sketch 35:21 slabs 27:10 slash 27:10 small 11:4,7,9,12,16,24 12:3,3,6,7,11,12,15 soil 13:14 14:13,16 15:16 20:15 **solicitation** 3:5,19 7:3 7:13 8:2,2,4,5,9,18 9:3,11,16 10:9 15:12 17:21 18:16 19:13 29:1.4 30:19 31:11 46:16 52:6 some 3:24 4:14 8:15 14:18 16:14 22:21 25:21,24 27:9 28:1 47:19 something 21:10 23:4 46.1 sometime 6:13 sometimes 43:17 somewhere 49:18 soon 52:13 sorry 11:6 12:24 17:19 23:10 25:1 31:12 sounded 12:17 source 13:24 26:5 south 15:25 16:3,8 44:12 53:13 Southeast 15:25 speak 4:1,10 16:25 25:1 speaker 4:1 9:6,16 10:17 11:3,7,11,18 11:21 12:14,17,20,22 13:5,9 17:5,18 18:12

19:7,18,21 20:3,7,10

32:17 34:4 42:19

44:2 47:13 51:13

52:10,13 53:20

51:20 54:23

20:17,18 21:5,21 22:4,8,17 23:10,16 23:22 24:15,23 31:25 32:4,15,20,25 33:9 34:1,3,8,13,22 35:1,9 37:18 39:7 40:20,24 41:9,14,17,20,23 42:4,8,22,24 43:5,15 44:7,10,20 45:1,22 46:7,10 47:2,4,9,15 48:1 50:5,11 51:4,7,9 51:13,25 54:9 spec 11:18 23:11 specific 8:15 9:21 13:15 24:18 49:13 specifically 10:20 13:17 30:10 specifications 5:11 7:21 9:10 13:21 14:6 19:7,9 20:19 24:8 28:9,17 29:21 31:1 43:1 47:25 specifics 8:4 specified 10:25 21:14 23:6,23 24:4 28:7 specifies 45:14 46:21 specify 22:19,20 24:8 24:12 30:3 42:6 specs 13:6 21:14 23:12 26:6 28:13 29:14,19 33:7,8,15 35:17 36:16 43:7,16 44:6 speculative 36:14 spelled 39:2 43:1 **spoke** 48:2 ss 55:6 standard 8:5 31:13 46:25 started 3:2 33:5 starts 38:24 state 17:11 55:5,9 statement 45:13,23 stay 52:19 stenographer 3:16,25 7:1stenographic 55:1 stenotype 55:10 step 48:7 sticks 24:21 still 35:5 44:5 stoplight 52:11 stream 30:12 40:15 street 44:13 stripped 36:3 stripper 21:7 22:18 31:4 stripping 35:23 36:21 37:16 40:8,9 42:13 study 37:22 submersible 36:18 submit 22:4 31:10 submits 12:8,8 ubmittal 19:10,13,14 28:12,14,22 33:25 34:5

submittals 19:15 32:2 32:10,20 33:4,16 submitted 29:2 successful 10:6 **sucking** 38:24 sufficient 13:19 44:17 suggestion 35:3 suitable 36:13 suited 38:3 sum 21:15 summer 26:13 sump 42:15 supposed 8:19 34:16 35:15,21 sure 4:25 8:14 11:15 25:7 26:18,22 29:4 52:4,5 surface 36:22 system 15:4,9 18:4 19:8 20:16 21:1.12.13.20 23:3,7 24:1 29:15 30:4,24 35:14,21,25 36:6,6,13 40:15,16 40:19 41:24 44:19 45:16,20 47:11,17,18 47:23 49:11 51:12,14 systems 7:16 14:22 35:4 42:12 46:22 53:17 system-wide 46:4 S-02 35:20 42:9

table 4:15 take 3:18 12:22 16:20 17:13,15 19:19 23:20 25:4 28:2 32:11 52:1 52:9,11,13 53:6,7,10 53:16 taken 3:20 6:2 taking 49:1 talk 8:1 19:9 52:2 talked 34:10 talking 32:14,19 35:4 talks 19:3 47:9 tank 30:23 31:4 34:15 team 5:7 technical 9:4 18:8 19:2 22:24 39:3 technology 19:5 telephone 44:25 tell 31:2,25 32:5 tenant 17:7 term 7:6 terms 7:12 47:20 48:2 53:12 54:5 test 19:2,5 37:23,24 38:5 39:3 48:12,13 50:25 testimony 55:11,15 tests 48:6

Thank 6:25 12:16 13:9

thanks 20:17 25:10

14:7 51:4

their 4:3 6:2.15 11:19 15:1 26:18 53:16 themselves 5:8,19 thereof 55:17 thing 8:25 13:13 27:17 44:16 45:4 53:11 things 21:6 26:1 52:3 54:6 thing's 35:15 think 4:15.15 11:13 14:15 15:11 22:25 24:17 29:10 31:9,25 32:5 35:18 43:10,20 43:21 44:22 45:1 46:10.17 51:6 52:20 53:4 54:20 third 15:7 48:7 though 4:19 thought 23:4 three 14:10 15:14 33:3 44:20,22 threw 8:11 through 5:14 8:16,24 9:19 16:8,10,13 24:19 25:25 27:1,24 33:7 35:12,14,19 36:7 37:15 40:9,18 46:19 53:15 54:20 **Tieger** 1:20 55:8.23 tight 48:23 time 4:2,6 10:25 15:3 16:24 24:3 25:7 29:5 31:13 32:1,4,6,7,12 32:16 33:4 34:6 48:25 49:1,4 52:15 times 26:21 37:16 48:24 titled 46:21 today 3:5,16 5:15 6:12 16:2 24:4 45:7 today's 5:4 together 8:11 25:23 top 43:8 **totally** 14:16 touching 26:17 tour 3:9 53:2 towards 19:4 43:10 traffic 16:8,9 27:19,22 27:23 52:12 trailers 45:3 training 45:12 trains 27:21 transcript 3:17,18 7:3

44:17 tremied 43:16 truck 26:18 trucks 16:10 26:10 true 55:14 trust 15:19 try 4:12 5:15 7:9 16:24 24:25 41:5 48:16 49:11 trying 6:1 35:22 two 6:3 14:10,12 15:23 17:9 18:17 22:2,6 28:11 36:1,16,17 37:22 40:10 46:1 48:6 52:2 53:17 type 9:22 44:16 45:4 **T&D** 41:17.19 under 9:9 13:8 17:13 17:16 19:19 28:19

29:14 33:10.11.24 45:11 46:13.15.20 underground 54:9 understand 17:3 42:10 understanding 7:20 uniform 8:6 49:16 unit 36:21 37:7,16 40:8 40:9,10 41:3 42:14 42:18 units 41:4.6 unless 8:4 55:3 until 5:15 upper 36:2,3,8,20 37:1 37:11 38:6,9,10,22 38:24 39:8,12,20,24 up-front 32:9 33:9 URS 5:19 6:18 41:12 usage 40:24 use 17:23 39:10 40:13 used 36:19 41:6 44:15 45:3 using 35:23,24 utilities 54:3,10,15,19 utility 54:17 U.S 8:5

vacant 14:16 54:5 vapor 30:11 40:9,14 41:3vapors 40:8,16 variable 22:22 various 9:19 vault 21:6,8 42:9,10,14 42:15 **verify** 24:22 versus 21:1 28:7 38:20 very 5:9 14:9 22:24 23:3,3 27:3 38:2 48:22 53:9 54:13,23 vessels 40:22 via 16:2 vinyl 23:23 30:11 40:12 40:14 visible 39:4 visit 16:1 25:13 VOCs 35:22 37:17 41:5 50:6

wading 8:24 waiting 44:5 walk 52:21 53:6,15,20 walk-through 53:6 want 3:11 13:13 16:12 19:24 21:18 22:2.22 22:23 26:5 27:2,20 33:18 35:5 38:13,17 39:7 40:4 42:17 43:21 47:14 53:6,7 53:24 54:2 wanted 8:13 34:11 53:23 warehouse 14:25 warrantee 23:24 29:14 46:3 47:10 warranties 30:16 45:16 45:16 46:20 warranty 24:1,5 30:15 45:24,25 46:1,21,22 46:24,25 47:12,17 watch 39:14 watching 27:4 water 7:15 10:1.1 14:21 15:5,9,17 18:3 18:13,18,24 19:1 20:15 28:10 30:23 34:18 35:23,24,25 36:2,7,12,19,20,22 37:9,10,11,14,25 38:7 39:5,16,25 40:3 40:6 42:9,13,16,18 49:3,6,23 50:2,5,8,10 50:21 water's 37:1 way 31:14 37:1,4 39:10

39:9 40:23 41:1,12 41:15,19,21 42:11,23 43:2,19 44:2,9,11,22 45:2 48:11 50:12 53:23 54:11,18 Web 8:3 9:7,12 website 9:9 18:17 31:17,22 39:4 week 24:18 weeks 33:3 welcome 3:2 53:8 well 10:1,6 14:22,23 15:3,9 17:5 19:2 20:16 21:5 23:4

42:11 52:7

weather 52:23

Weatherby 2:7 6:18

18:20 35:13,20 37:21

25:18 30:14,17 31:17

31:22 35:16,25 36:1

transducer 39:11,20,24

Transportation 14:25

treatment 7:16 10:2

23:3 30:24 31:5

19:8 20:20,21 21:13

34:18 35:14 40:9,16

transducers 22:23

transformer 44:13

15:16 41:20

trays 21:7

55:2,13

						Page /
abla	36:19 37:13,14,15	zealite 22:19 23:23,25	55 55:13		 	544
	38:2 39:4,6,8,23	24:3,11 29:9,13 30:4				
	42:21 43:22 49:12	30:4,6,10 40:13,14	6			
,	53:17,18 vells 7:16 9:22 15:5,6	41:4	60 29:2			Į.
'	15:18 17:6,7 18:9	0	7			
	28:6 37:4,10,22 38:3	01300 33:25	73:13			
	48:3 49:21	049268 55:23	7th 8:20			
V	vell-documented		7:00 26:25 27:1		•	
l v	21:23 vere 6:19 16:14 18:8	1 1 20 2 22 10 55 12				
'	22:6 27:24 31:23	1 29:3 33:10 55:13 1.3 12:20	8			
	34:10 35:3	1.3A 29:17,22	82nd 26:11 52:9			
	vetlands 14:19 27:7	1.3B 29:24	•			
l v	ve'll 3:20 4:7,17 5:15	1.4 13:3 33:25				
	6:21 8:17 10:22 17:20 20:1 24:20	1.6 28:14,20				
	25:9 28:3,9 31:16	1.6A 19:18 1.7B 21:21 28:22				
- 1	37:6 38:13 45:8	1:00 25:14 51:25				
	52:20 53:14,19	10 6:2,11 8:22 11:4,11				
Y	ve're 4:7 5:5,13 7:2,8 7:11,13 9:3 16:2	11:14,17,23		·		
	17:15 21:25 23:20	10's 6:3 10-percent 12:9		·		
	25:23 29:1 35:22,23	10:30 5:16				
-	38:17 40:4,10 42:16	11201 19:9,18 21:21				
İ	43:23 46:12 49:16,17 50:18,22 51:21 53:1	28:13,20,22 29:24				
}	53:5 54:20	30:8 45:12 46:20				
l w	ve've 6:2 10:4,22 25:24	12:00 8:20,23 1200 8:22				
	26:4 50:20 53:4	13 13:1,7				
	whatnot 42:25	1300 33:21				
	whichever 12:21 13:3 while 6:11	1300-2 33:22		,		
	whole 55:16	1300.2 33:17 14 28:8			4	
	vindrow 27:15	14-inch 17:10 28:6				
	vire 44:13 Vitness 55:18	15 1:18 25:8,21				
	vondered 48:8	15-minute 23:20				
	vondering 5:25 20:11	16-inch 17:8 28:7				
W	voody 27:14	<u> </u>				
W	vork 13:20 16:6 26:19	2.8A2 30:9				
	32:21 37:5 39:22,24 45:3 54:6,7	20 25:15 31:12				
l w	vorked 15:2 26:13	2002 18:19,22	•			
	50:20	2003 1:18 18:20,22 55:19				
	vorking 6:21 54:22	2008 55:4		4		
	Vouldn't 35:7 VRD 43:23.24	21st 31:12				
	vrite 4:16	22nd 33:1 27th 24:21				
l w	vriting 22:4 23:1	27th 24:21 29-acre 14:15				
W	vritten 4:18 13:22					
	16:13,14 24:16,20					
	· · · Y	3.10 46:20				
y	eah 16:22 33:24 34:9	3.9 45:12 30 29:3 49:18				
ا ا	37:21 43:4,19 46:7	30 29.3 49.18 30th 33:3				
	46:10 48:11 49:21	35 12:18,20 13:2				
\ \ x 7	50:11,12 51:8,9,14 ear 15:10,12 19:6					
'	48:25	4 2 12 22		· · · · · · · · · · · · · · · · · · ·		
] y	ears 6:3,10,11 46:1	4.2 12:23 480 45:1				
4	55:2	TJ.1	·			
		5				
\exists		5 55:2				
L.						